Columbia University Bulletin

The Faculty of Medicine
College of Physicians & Surgeons
1990–1991

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Inquiries

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The Faculty of Medicine
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Academic Calendar, 1990–1991

The following Academic Calendar was correct and complete as of the time of publication; however, the University reserves the right to revise or amend it, in whole or in part, at any time. Information on the current status of the Academic Calendar may be obtained in the Office of Student Information Services, 141 Black, 212-305-3477.

Major Religious Holidays

For a statement of University policy regarding religious holidays, see *University Regulations*.

Some of the major holidays are listed below. The Jewish and Islamic holy days begin at sundown of the preceding day. The exact dates for the Islamic holy days may vary by one or two days from the estimated dates given below.

1990

Thursday, Friday, September 20, 21	Rosh Hashanah
Saturday, September 29	Yom Kippur
Thursday, Friday, October 4, 5	First days of Succoth
Thursday, Friday, October 11, 12	Concluding days of Succoth
Tuesday, December 25	Christmas

1991

Friday, March 29	Good Friday
Sunday, March 31	Easter
Saturday, Sunday, March 30, 31	First days of Passover
Friday, Saturday, April 5, 6	Concluding days of Passover
Tuesday, April 16	Id al Fitr
Sunday, Monday, May 19, 20	Shavuoth
Sunday, June 23	Id al Adha

SEPTEMBER

3 **Monday. Labor Day holiday for first-, second-, and third-year students.**

5–6 Wednesday and Thursday. National Board Part I Examination for students failing June 12–13 examination.

25–26 Tuesday–Wednesday. National Board II examination for fourth-year students. Passing required for graduation from P&S.

OCTOBER

24 **Wednesday. Awarding of October degrees.**

NOVEMBER

6 **Tuesday. Election Day. Half-day holiday for first- and second-year students.**

22–23 **Thursday–Friday. Thanksgiving holiday for first- and second-year students.**

22 **Thursday. Thanksgiving holiday for third-year students.**

DECEMBER

3 Friday. Last day to file *late* applications for February degrees.

15 **Saturday–Tuesday, January 1. Vacation for third-year students.**

19 **Tuesday–Monday, January 1. Vacation for second- and third-year students.**

22 **Saturday–Sunday, January 6. Vacation for second-year students.**

JANUARY

2 Wednesday. Resumption of classes for third-year students.

3 Thursday. Resumption of classes for first-year students.

7 Monday. Resumption of classes for second-year students.

21 Monday. **Martin Luther King's Birthday observed. Holiday for first- and second-year students.**

FEBRUARY

13 **Wednesday. Awarding of February degrees.**

18 **Monday. Washington's Birthday. Holiday for first- and second-year students.**

MARCH

*1 Monday. Last day to apply for all degrees to be conferred in May.

23–31. **Saturday–Sunday. Spring vacation for first- and second-year students.**

APRIL

2–3 Tuesday and Wednesday. National Board Part II for students failing September 26–27 examination.

MAY

8 Wednesday. Dean's Day for Medical Student Research.

15 **Wednesday. Columbia University Commencement and Convocation of the College of Physicians and Surgeons.**

27 **Monday. Memorial Day holiday for first-, second-, and third-year students.**

31 Friday. Last day of classes for second-year students.

JUNE

7 Friday. Last day of classes for first-year students.

11–12 **Tuesday and Wednesday. National Board Part I Examination. Passing required for graduation from P&S.**

12 Wednesday. Last official day of second year.

14 **Friday. Major Clinical Year concludes for third-year students.**

17 **Monday. Academic year begins for Class of 1992.**

*Applications received after this date will automatically be applied to the next conferral date.

JULY

1 Monday. Class of 1992 reports to hospital rotations. Hospital rotations begins for Class of 1993.

4 **Thursday. Independence Day holiday.**

Dates of National Board Examinations 1990–91

Part I	June 12–13, 1990	Required by P&S
	September 5–6, 1990	Not given at P&S
	June 11–12, 1991	Required by P&S
	September 4–5, 1991	Not given at P&S
Part II	September 25–26, 1990	Required by P&S
	April 2–3, 1991	Not given at P&S

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HSUEH-HWA WANG. *Professor Emeritus of Pharmacology*

SHIH-CHUN WANG. *Pfeiffer Professor Emeritus of Pharmacology*

JOHN J. WEBER. *Professor Emeritus of Clinical Psychiatry*

ROBERT J. WEISS. *Delamar Professor and Dean Emeritus of Public Health*

SIDNEY C. WERNER. *Professor Emeritus of Clinical Medicine*

ROGER WILLIAMS. *Professor Emeritus of Public Health (Medical Entomology)*

MYRON WINICK. *Williams Professor Emeritus of Nutrition (in Pediatrics and the Institute of Human Nutrition)*

SAMUEL M. WISHIK. *Professor Emeritus of Public Health (Public Health Practice)*

JAMES WOLFF. *Professor Emeritus of Pediatrics*

JOSEPH ZUBIN. *Professor Emeritus of Psychology*

The College of Physicians and Surgeons and Affiliated Hospitals

The College of Physicians and Surgeons is guided by the principle that medical education is university education. The acquisition of knowledge and skills is important in professional education, but far more vital is a profound understanding of the science, the art, and the ethic within which both knowledge and skill are applied. As a part of Columbia University, the College builds its curriculum, selects its officers of instruction, and marshals its enormous resources of equipment and clinical experience to develop in the student this understanding of medicine. Within the curriculum for the M.D. degree is the fundamental knowledge upon which later specialization is built, and from which the natural bent is discovered toward general or special practice, or toward research, teaching, or administration. The postgraduate programs of the College provide training in the specialties, help the graduate physician to keep abreast of new knowledge, and support the research from which the physician's knowledge develops.

History of the College and University

Columbia University began as King's College, which was founded in 1754 by royal grant of George II, King of England, "for the Instruction of Youth in the Learned Languages, and the Liberal Arts and Sciences." The American Revolution interrupted its program, but in 1784 it was reopened as Columbia College. In 1912 the title was changed to Columbia University in the City of New York.

King's College organized a medical faculty in 1767, and was the first institution in the North American Colonies to confer the degree of Doctor of Medicine. The first graduates in medicine from the College were Robert Tucker and Samuel Kissam, who received the degree of Bachelor of Medicine in May 1769, and that of Doctor of Medicine in May 1770 and May 1771, respectively. Instruction in medicine was given until interrupted by the Revolution and the occupation of New York by the British, which lasted until November 25, 1783. In 1784 instruction was resumed in the academic departments, and in December of the same year the medical faculty was reestablished. In 1814 the medical faculty of Columbia College was merged with the College of Physicians and Surgeons, which had obtained an independent charter in 1807. In 1860, by agreement between the Trustees of the two institutions, the College of Physicians and Surgeons became the Medical Department of Columbia College; from that time on the diplomas of the graduates were signed by the President of Columbia College as well as by the President of the College of Physicians and Surgeons. The connection was only a nominal one, however, until 1891, when the college was incorporated as an integral part of the University. Since September 1917, women have been admitted to the College on the same basis as men.

The Columbia-Presbyterian Medical Center was opened in the spring of 1928, seven years after the establishment of a permanent alliance between Columbia University and the Presbyterian Hospital. It consists of the following units: the divisions of the University Faculty of Medicine (the College of Physicians and Surgeons, the School of Nursing, the School of Public Health); the University School of Dental and Oral Surgery; the Presbyterian Hospitals and its subdivisions; the New York State Psychiatry Institute; and the Washington Heights Health and Teaching Center.

The Medical Center occupies a plot of land given to Columbia University and the Presbyterian Hospital by Mrs. Stephen V. Harkness and Mr. Edward S. Harkness. It comprises about twenty acres extending from West 165th Street to West 168th Street and from Broadway to Riverside Drive and is readily accessible from all parts of the city. A map of the Medical Center is given on the inside back cover.

The College of Physicians and Surgeons is at 630 West 168th Street between Broadway and Fort Washington Avenue in a seventeen-story building, each floor of which connects with the wards and services of the Presbyterian Hospital. The William Black Medical Research Building is a twenty-story building, containing research laboratories for the faculty members of the College of Physicians and Surgeons. It is connected with the College building and is located at 168th

Street and Fort Washington Avenue. The Julius and Armand Hammer Health Sciences Center, a twenty-story structure diagonally opposite the William Black Medical Research Building, opened its teaching, research, and library facilities in 1976.

Augustus C. Long Health Sciences Library

The Columbia University Health Services Library is housed in the Julius and Armand Hammer Health Sciences Center, 701 West 168th Street. The four floors occupied by the library offer a comfortable atmosphere conducive to study, including such amenities as individual study carrels, group study and conference rooms, and a leisure reading lounge.

With almost 450,000 volumes and a staff of 50, the Health Sciences Library is one of the largest medical center libraries in the United States. It is well able to serve the needs of faculty, students, and researchers in the health sciences disciplines. More than 4,000 periodicals are received regularly. The library includes a comprehensive media center equipped with audiovisual materials and equipment, a microcomputer laboratory and classroom, and a significant rare book and special collections section. The library offers a wide array of information services, including computerized literature searching, individual consultation on research topics, and instruction on the use of information resources. Materials describing library services are available on request.

Other Columbia libraries, located on the Morningside campus, are open to all students and faculty who carry Columbia identification cards. The main collection is housed in Butler Library; special and departmental collections are housed in other buildings on the campus. Columbia students and faculty are also permitted access to the collections of many other research institutions including Stanford and Yale Universities, under the auspices of the Research Libraries Group. Information about the Research Libraries Group can be obtained from the Health Services Library.

Comprehensive Cancer Center and Institute of Cancer Research

The Cancer Center was established in 1972. In 1979 the Center was awarded Comprehensive status by the National Cancer Institute in recognition of its broad responsibility for research, patient care, cancer education, and cancer control activities. The Center coordinates, integrates, and facilitates cancer research, education, and patient care in the Health Sciences Faculties of Columbia University and its affiliated hospitals in New York City—Presbyterian, St. Luke's-Roosevelt, Harlem—as well as Overlook in Summit, New Jersey, and Morristown Memorial Hospital in New Jersey. The Cancer Center was organized to effect the efficient and cooperative use of all Center resources, maximize the dissemination of information among Center personnel, stimulate basic cancer research, and facilitate the rapid translation of cancer research findings into programs for improving capabilities for the prevention of cancer and the diagnosis, treatment, and care of patients with cancer.

The Institute of Cancer Research of Columbia University College of Physicians and Surgeons was established in 1911 with funds bequeathed to the University by George Crocker. It moved from its original quarters on 116th Street to the campus of the Columbia-Presbyterian Medical Center in 1938.

The Comprehensive Cancer Center and the Institute of Cancer Research are mutually involved in a clinical and basic research cancer effort, although their administrations function autonomously.

The Centers for Community Health

The Centers for Community Health are composed of a Center for Health Services Research and a Collaborative Program in Oral Health with the School of Dental and Oral Surgery whose research program is one of the few in the country directed toward an area of health services which

has long been neglected. The Centers provide a locus for student teaching and research by the Faculty of Medicine and the School of Public Health, especially health administration, on problems of the delivery, financing, and distribution of health care in a diverse group of institutions in the inner city and the suburbs.

Center for Geriatrics and Gerontology

The Center was established in 1979 by the Faculty of Medicine and the New York State Office of Mental Health and is a resource for teaching, research, and clinical model development in geriatrics and gerontology in medical and long-term care facilities and in community settings. The components of the Center comprise an independent entity in the Faculty of Medicine, a Division of the School of Public Health, and a Department in the New York State Psychiatric Institute. Its major focus is cross-national research and the care of the elderly, with an emphasis on the interplay of medical, mental, and social problems.

Howard Hughes Medical Institute Program in Molecular Neurobiology

The Program is the only one of the ten Hughes Medical Institute Programs in the country to be devoted to the neurosciences. Its establishment in 1984 made possible the scientific integration of the College's widely acclaimed research efforts in the neurobiology of ion channels, learning, development, and critical areas of molecular genetics. In addition to six established investigators in these fields, the Center personnel include postdoctoral fellows, staff scientists, and support staff.

Howard Hughes Medical Institute Program in Structural Biology

Begun in 1986, the program is part of a larger effort by the Institute, which houses several of its research laboratories in various medical centers. This program, which focuses on biophysical studies of molecular structure, is centered in three areas: direct research activities in diffraction studies of macromolecular structure and function, core facilities for molecular biophysics, and a synchroton radiation resource at Brookhaven National Laboratory.

Center for the Study of Society and Medicine

The Center was established in 1982 to enrich the teaching and practice of medicine with the conceptual and policy insights of the social sciences and humanities. Its collaborative effort provides a unique opportunity for scholars trained in sociology, law, history, social work, philosophy, and economics to work together with medical clinicians and researchers. Principal members of the Center faculty have appointments in the Department of Medicine, which enables them to offer instructional programs taught jointly by clinicians, social scientists, and humanists. Center faculty teams teach a required course for second-year medical students on the social forces shaping contemporary medical practice, conduct seminars for medical house staff, participate in daily hospital rounds, and lecture at Columbia-affiliated institutions. The Center also offers summer research fellowships for first-year medical students to study issues in social medicine.

Irving Center for Clinical Research

The Herbert and Florence Irving Center for Clinical Research is a resource for the purpose of stimulating multidisciplinary, intensive investigation of human disease. It includes a fourteen-bed Adult Unit, a four-bed Pediatric Unit, a Metabolic Diet Kitchen, an Outpatient Unit, a

Core Laboratory, and a Computer Facility. The Center is designed so that acutely ill, as well as ambulatory patients, can be studied. Use of the Center is open to qualified faculty members of the clinical and basic science departments of the College of Physicians and Surgeons upon approval of the Advisory Committee. Although the primary purpose of the facility is concerned with research, it also provides unusual opportunities for undergraduate and postgraduate training in clinical investigation.

In the Adult Unit major research activities include bone and mineral metabolism, cardiac electrophysiology and pharmacology, cardiovascular pathophysiology, cardiac transplantation, endocrinology/endocrine transplantation, epidemiology, extracorporeal and photochemotherapy, hypertension, immunology/rheumatology, lipid and lipoprotein metabolism, movement disorders, neuromuscular diseases, pharmacokinetics and antibiotics, porphyria, psychiatry, reproductive biology, secretory diarrheas, and thrombosis.

In the Pediatric Unit major research activities include hemolytic anemias, infant nutrition, lead poisoning, perinatology and total parenteral nutrition.

Gertrude H. Sergievsky Center

The Sergievsky Center is a center for research in the epidemiology of epilepsy, cerebral palsy, and developmental brain disorders. The Center has a core scientific faculty concerned with the development of research in the epidemiology of those diseases. Funded with an endowment, it participates in the teaching programs of the Epidemiology Division of the School of Public Health and the Departments of Neurology and Pediatrics and provides a major resource in epidemiology research and training in neuroepidemiology.

Institute of Human Nutrition

The Institute of Human Nutrition is an interdisciplinary unit whose mission is to study all aspects of nutrition that relate to human health. The Institute serves to conduct, coordinate, and lead nutrition research and education activities throughout Columbia University and its affiliated institutions. These activities include basic science research, clinical research and training, public health/preventive medicine programs, and education and training at many levels. A long-standing mission of the Institute is to train individuals for scholarly activities and for positions in universities and research centers that are in the forefront of the movement to advance nutrition as a health science. In addition, the Institute seeks to augment the training of physicians and other health specialists who are genuinely interested in emphasizing nutrition in their professions.

To achieve this integration of purpose and at the same time allow for the specialization necessary for the best research and teaching, the Institute functions to coordinate academic nutrition activities being carried out within many units (Faculties, Departments, Centers) within the Columbia University system. Although each unit conducts its own program of research and training, combined research projects among the units are under way and joint seminars and courses involving faculty members and students in all units are conducted regularly.

The facilities participating in the Institute programs include the Irving Clinical Research Center; the Protein Chemistry Core Laboratory and Arteriosclerosis Research Center, and the St. Luke's–Roosevelt Hospital Center's Obesity Research and Nutrition and Metabolic Research Centers.

International Institute for the Study of Human Reproduction

The International Institute for the Study of Human Reproduction was founded in 1965 by Dr. Howard C. Taylor and was made possible by a substantial grant from the Ford Foundation. The primary purpose of the founders was to foster research in the sciences relevant to the solution of the world population problem. In more recent years, the aims of the Institute have been interpreted more broadly to include teaching, research, and the provision of clinical and social ser-

vices related to the reproductive health of men and women. The Institute now consists of three centers.

The Center for Reproductive Sciences is a multidisciplinary group of basic and clinical research scientists with a specific interest in the overlapping field of genetics and early development, particularly concerned with understanding the mechanisms which control normal germ cell development, normal genome expression and their significance in the production of abnormal human offspring. The Center includes divisions of genetics of reproduction, male reproductive endocrinology, female reproductive endocrinology, neuroendocrinology and gametogenesis, growth and early development. Individual and collaborative research has been carried out in specific basic science areas. Among them are gene expression in early development, the regulation of pituitary/hypothalamus peptide hormone gene expression, biochemistry, ultrastructure, and genetics of mammalian germ cell production, female primate reproductive neuroendocrinology, the ontogeny of sexual differentiation in organotypic tissue culture systems of the rodent brain, CNS gonadotropin receptors, kinetics of GnRH metabolism, the role of trace elements in spermatogenesis, biochemical kinetics of spermatogenesis, and chemistry of sperm motility. Clinical activities in human male and female reproductive endocrinology and genetics are also well represented with emphasis on hormonal or genetic infertility, induction of ovulation, and therapy of male infertility.

The aims of the Center for Population and Family Health are more specifically relevant to the social consequences of human reproduction. The Center's community-oriented Reproductive Health Services for Women Unit, in cooperation with the division of ambulatory care of the Department of Obstetrics and Gynecology, provides care, with emphasis on services for adolescents, to the community surrounding the Columbia-Presbyterian Medical Center. The Center's International Research and Technical Assistance Unit works with a number of foreign governments and with private organizations toward improved basic health and family planning services for poor people in developing countries. The Social Sciences Research Unit conducts ongoing evaluations of the Center's domestic reproductive service programs and carries out a basic research program on the causes and consequences of adolescent fertility. Finally, as a division of the School of Public Health, the Center provides academic programs leading to the M.P.H. and Dr.P.H. degrees in the fields of population/family planning, maternal and child health, and public health nutrition.

The offices of the Centers for Reproductive Sciences and for Male Reproduction are at 630 West 168th Street and the office for the Center for Population and Family Health is at 60 Haven Avenue, Floor B-3, New York, N.Y. 10032.

Affiliated Hospitals

The Presbyterian Hospital in the City of New York

Founded in 1868, the Hospital joined with the Columbia College of Physicians and Surgeons to form the Columbia-Presbyterian Medical Center, which opened in 1928. Under the terms of the permanent alliance agreement with Columbia University, members of the hospital staff are appointed by the Board of Trustees of the hospital on nomination by the Trustees of the University. The Presbyterian Hospital has an overall capacity of 1,485 beds and 96 bassinets. A major modernization program completed in 1989 encompassed the renovation of 440 beds and the replacement of 745 at Columbia-Presbyterian Medical Center, the expansion of pediatric surgery and imaging in the Babies Hospital Division, and the completion of a new 300-bed community Hospital—the Allen Pavillion—at the northern tip of Manhattan.

The Hospital includes all of the individual units described below:

The new Milstein Hospital Building, the single largest hospital pavilion, with 745 beds, was dedicated in 1989.

The New York Orthopaedic Hospital opened as a dispensary in 1866 largely because of the interest taken in the care of the crippled by Theodore Roosevelt, father of the president of the same

name. The hospital was located in its own buildings at 420 East 59th Street until December 1950, when it was merged with The Presbyterian Hospital as its orthopedic service.

Squier Urological Clinic is the Urology Service of The Presbyterian Hospital.

Sloane Hospital for Women, currently the Hospital's obstetrics and gynecology service, was built at West 59th Street and Amsterdam Avenue and presented to Columbia University by Mr. and Mrs. William D. Sloane in 1886.

Harkness Pavilion, erected when the Medical Center was established in 1928, provides a variety of adult patient care services.

Babies Hospital, founded in 1887, provides for general medical and surgical care of infants and children up to their late teens, and care for premature babies. It became The Presbyterian Hospital's children's hospital division in 1943.

Neurological Institute, one of the first nongovernmental hospitals in the country for the treatment of diseases of the nervous system, was founded in 1909. It moved from East 67th Street to the Medical Center in 1929.

The Edward S. Harkness Eye Institute, site of the Hospital's Ophthalmology Service, opened in 1933. It has complete facilities for the medical and surgical treatment of adults and children with diseases of the eye. On January 1, 1940, the work of the Herman Knapp Memorial Eye Hospital was taken over by the Institute.

Vanderbilt Clinic was presented to Columbia University by the Vanderbilt family in 1888 and is the outpatient department for the Presbyterian Hospital.

Atchley Pavilion contains administrative and doctors' offices as well as specialized ambulatory care centers.

The Allen Pavilion is a 300-bed community hospital which opened at 220th Street and Broadway in 1988.

Washington Heights/Inwood Ambulatory Care Network Corporation (ACNC) is a multi-site network of doctors' offices established in the surrounding community by the Presbyterian Hospital.

The Mary Imogene Bassett Hospital

The Mary Imogene Bassett Hospital in Cooperstown, New York, is a rural hospital combining the characteristics of a university medical center with a dedication to the delivery of both primary health services to the local community and highly specialized services to a large referral area. The hospital has 180 beds and a staff of specialists who are all salaried and full time. In 1989 there were 155,220 visits to the Outpatient Department and 7,317 admissions. The teaching program for house staff and students is a highly personalized one based on a team approach to medical care. Members of the staff conduct biomedical research and are interested in models for the delivery of health care to the community. The library is unusually extensive for a hospital of this size, with over 22,000 volumes and about 600 subscribed journals. Since 1947 the hospital has had a formal affiliation with Columbia, and currently about 60 students from Columbia elect programs at the Mary Imogene Bassett Hospital. The recently added O'Connor Division has about 780 admissions and nearly 9,600 outpatient visits yearly.

Harlem Hospital Center

Harlem Hospital Center, founded in 1887, is a progressive acute general teaching hospital offering primary, secondary, and tertiary care for children and adults living in the Central Harlem area and environs. The main complex consists of seven buildings. Eleven strategically located satellites extend the hospital out into the community. Operating with 678 certified beds and managing over 722,000 annual clinic visits, the hospital functions as the primary health care provider for a catchment area of three and a half square miles. Since 1968, the College of Physicians and

Surgeons, through a contractual arrangement with the New York City Health and Hospitals Corporation, has been responsible for all professional medical services in this hospital and nominates its professional staff. This affiliation presents a unique opportunity for teaching students, interns, and residents in the traditional disciplines of medicine and provides increasing opportunities for involvement in community medicine.

The Helen Hayes Hospital

The Helen Hayes Hospital at West Haverstraw, New York, founded in 1900, is an independent rehabilitation hospital with complete medical services, owned and operated by the state through the New York State Health Department. Since 1966 the hospital has had a formal affiliation with Columbia University. The medical specialties and allied health professionals are organized into disability units that provide comprehensive care through an integrated team approach, providing unique educational opportunities for residents and allied health students. The hospital has over 1,150 admissions and 10,000 outpatient visits a year. The hospital's longstanding program of bioengineering research has become the Orthopedic Engineering and Research Center; to this has been added the Regional Bone Center, Regional Arthritis Center, and Neurology Center.

Morristown Memorial Hospital

Morristown Memorial Hospital is a regional hospital center offering comprehensive health services for the entire family. It is a voluntary, nonprofit institution with a history of community service dating back to 1892. The hospital has become a central health care facility serving Morris, Warren, Sussex, and Somerset counties, and a medical referral center for all of northwest New Jersey. Morristown Memorial is also a teaching hospital, with programs for medical, nursing, and technical staff. It became affiliated with the College of Physicians and Surgeons in 1979. Morristown Memorial, Overlook Hospital in Summit, and St. Barnabas Hospital in Livingston are members of the Shared Services Consortium pioneering regionalized health care services in northern New Jersey. With 687 beds, 3,300 employees (including 1,200 nurses), a medical and dental staff of more than 600, and a full spectrum of basic and highly specialized services, Morristown Memorial combines the traditional advantages of a community hospital with the advanced capabilities of a progressive medical center. The hospital has two divisions: one where the emphasis is on acute care; the other, a center for preadmission testing, geriatric extended care, outpatient and alcoholic services, and planned facilities for subacute and rehabilitative care.

Overlook Hospital

Overlook Hospital in Summit, New Jersey, is a 551-bed suburban community hospital, founded in 1906, which became a teaching affiliate of the Columbia University College of Physicians and Surgeons in 1975. Overlook trains approximately 96 residents a year. It is a general, voluntary, nonprofit institution accommodating 25,000 inpatients and 100,000 outpatients each year. Overlook offers particularly strong training in family practice and primary care internal medicine and pediatrics through a program of broad-based clinical experience for graduate physicians. Outreach programs have been pioneered in alcoholism and other addictive illness, home-care and home-based hospice, and mobile intensive care utilizing paramedics. The hospital's Center for Community Health provides outpatient services including preadmission testing, ambulatory surgery and radiology, and a consumer health library. A construction/renovation project, which will increase the bed complement by 84, was initiated in 1983. Overlook maintains an open staff policy in regard to admissions to the medical staff, which at the present time numbers 550.

St. Luke's—Roosevelt Hospital Center

St. Luke's Hospital Center, which has included Woman's Hospital since 1953, merged with The Roosevelt Hospital in 1979, forming a Hospital Center containing 1,315 beds and serving a catchment area spanning Manhattan's west side from 34th to 134th Streets. Both hospitals had maintained teaching affiliations with the College of Physicians and Surgeons of Columbia University for many years before 1971, when they each became full University hospitals. The medical staff of the Hospital Center numbers over 1,200; the house staff consists of approximately 400 fellows and residents.

St. Luke's Hospital Center Division

St. Luke's was established in 1850 and has been on Morningside Heights next to the main Columbia campus since 1896. It merged with Woman's Hospital in 1953, and today the hospital complex contains 780 beds, including 63 pediatric beds, 58 obstetric beds, and 58 bassinets. Approximately 26,500 patients are admitted yearly to the four major and eleven specialty services.

St. Luke's is recognized as a leader in such fields as heart surgery, kidney transplantation, artificial kidney treatments, and noninvasive diagnosis (ultrasound). The Hospital Center's clinically oriented research projects are involved in such areas as blood diseases, coronary artery disease, gastroenterology, obesity and nutrition (it is the site of the only federally funded obesity research center), pulmonary disease, renal transplant-immunology, and bioengineering. A medical library of 32,000 volumes is an integral part of the Hospital Center. St. Luke's is both a major referral institution and a community hospital. The more than fifty specialty and subspecialty clinics see 50,000 patients yearly (totaling approximately 180,000 visits); the Emergency Room, a designated Trauma Center, is one of the busiest in Manhattan, with 77,000 visits annually. The Hospital Center also operates extensive community programs in alcoholism treatment, drug detoxification, and mental health.

Roosevelt Hospital Division

The Roosevelt Hospital treated its first patient in 1871. It contains 535 beds and bassinets. There are about 180,000 outpatient and emergency-room visits annually. Approximately 19,000 patients are admitted to this hospital yearly. The hospital is engaged in many research and teaching activities. A new research building containing 52,000 square feet of laboratory space for all departments was opened in 1973. The medical library contains 26 ,000 volumes and subscribes to 540 medical and technical journals. The hospital is actively engaged in community programs, as represented by its Children and Youth Program and by its Drug Addiction and Alcoholism Programs and many other outreach and community services sponsored by the Departments of Pediatrics, Psychiatry, and Medicine, and the ambulatory care division. The hospital's new emergency room treats over 51,000 people yearly.

New York State Psychiatric Institute

The institute is the oldest psychiatric research institute in the United States. It was built and is maintained by the New York State Office of Mental Health. Through a contractual arrangement, it is affiliated with the College of Physicians and Surgeons. The Institute's functions are to do research into the causes and treatment of psychiatric illness, to provide education for mental health professionals, and to provide the highest quality of clinical care for patients with psychiatric disorders. The Institute currently maintains 25 major research departments, a research hospital, and a wide variety of specialized outpatient departments which provide diagnostic and treatment programs.

Admission, Registration, Expenses, and Financial Aid

Entering classes are enrolled in the College in August of each year. The minimum requirement for admission is attendance for three full academic years at an approved college of arts and sciences. Most applicants present four academic years and a bachelor's degree, although these are not required. The composition of our entering classes indicates, however, that only a relatively small number of three-year students have been accepted in the past by our Committee on Admissions.

The college program must have included English, physics, biology, organic chemistry (including at least one semester of laboratory), and some other course in chemistry covering at least one academic year. These requirements have been designated as mandatory not only by our faculty but by various state medical licensure boards as well; accordingly, applicants cannot be excused from them. Students applying for admission must also have taken the Medical College Admission Test within four years of the date of their application. The latest time the MCAT can be taken is the autumn of the year preceding anticipated enrollment. The student may have concentrated in any area—in the natural sciences, social sciences, humanities, or arts—but evidence of a balanced education, as well as demonstrated interest and ability in the natural sciences, is preferred.

Application Procedure

Application for admission must be filed on a special form obtained from the Admissions Office of the Faculty of Medicine. Applications should be submitted as promptly as possible, though they are accepted only for the next incoming class. Application forms are available beginning in June of the year preceding admission, and they must be filed by October 15. The completed form must be accompanied by the application fee of $50. The fee helps to cover the cost of processing the application; it is therefore not returnable and is not credited toward tuition.

Applicants will be notified when their applications have been received. The Committee on Admissions, however, evaluates only completed applications, that is, those for which letters of recommendation have been received, along with MCAT scores and transcripts. Applicants will be notified, also, when their applications have been completed; if such notification is not received within sixty days after the date of the preliminary processing of an application, applicants should make inquiries at the Admissions Office to learn which items have not yet been received. Failure to receive letters of recommendation and transcripts is the most common cause of delay in the completion of applications.

If a personal interview is required in connection with the application, it will be requested only by the Admissions Office.

Selection of Students

The Committee on Admissions devotes months to the task of selecting a class of 148 from a very large number of applicants. Obviously there will be many well-qualified students whom the College will not be able to accept. The Faculty of Medicine recognizes its obligations in the field of medical education and research not only to the local area but to the nation as well. Admission will not be offered to any applicant who has not been interviewed by one of the College's representatives. Impressions from such an interview, as well as scores on the MCAT and academic records, will be considered in selecting individuals for admission. Other selection criteria are listed below.

The Committee places great importance on the fact that the students have learned to think for themselves, to explore, to work hard under their own initiative, to consider alternatives and make decisions, and to develop a desire for a continuous program of self-education. In the selection of students, preference is given to those who, in the opinion of the Committee on Admis-

sions, have shown high achievement in their college education, a mature sense of values, sound motivation, qualities of leadership, and ability to assume responsibility, and to those who have already given evidence that they are qualified to complete all requirements of our curriculum and to graduate as ethical, compassionate, and competent physicians.

The practice of medicine is both a science and an art and, to treat the patient as a whole person, the doctor must be a whole person. Students planning a career in medicine should be motivated toward becoming leaders in medical thinking, rather than technicians, because medical practice is both a private enterprise and a public responsibility. The liberal arts college offers the opportunity to prepare for a happier and more useful life of citizenship. Years of specialization lie ahead in a professional career, but the foundation of all advanced study is a broad liberal education, of which science is a part.

Admission to Advanced Standing

Application for advanced standing is possible for students wishing to transfer into the second- or third-year classes. Transfer into the fourth year is not possible. Students from foreign schools wishing to transfer must apply to the second-, not the third-year class. The only applicants who can be considered for transfer into either the second- or the third-year classes are those who are currently enrolled in an accredited medical school, or else have been so enrolled within one year preceding the time they make application. The number of places available for transfer into both the second- and third-year classes is extremely limited, usually between two and four places for each class; in some years there have been no places available. The deadline for receipt of applications for both classes is April 15.

Admission of Foreign Students

Applicants need not be citizens of this country but preferably should have received their premedical education at an accredited college or university in the United States or Canada. Applications may be submitted by individuals who have been educated elsewhere, but in the past the Committee on Admissions has had great difficulty in finding a satisfactory means of evaluating the caliber of education available in the many colleges and universities throughout the world. Likewise, the Committee will accept applications for admission with advanced standing to this school from individuals who have begun their medical education in schools outside the United States and Canada, but it has been able to admit very few individuals, either to an entering class or with advanced standing, whose previous education has not been obtained in this country or Canada.

Registration

Before attending classes, each student must register with the Student Financial and Information Services office during the registration period listed in the Academic Calendar. Incoming students are notified of the date, time, and place through information provided in the admissions packet. Thereafter, this information is sent to students by the Student Financial and Information office. This office, located in room 141 of the Black Building, provides registrar and bursar services. Daily hours are 9:30 a.m. to 4:30 p.m. Mondays, Thursdays, Fridays; 9:30 a.m. to 6 p.m. Tuesdays; closed Wednesdays.

All students are asked to give Social Security numbers when registering in the University. Students who do not have Social Security numbers should obtain them from their local Social Security office well in advance of registration. Foreign students should consult the Office of Foreign Student Services, 208 Lewisohn Hall, Morningside campus, for further information.

Students who are not citizens of the United States and who need authorization for special billing of tuition and/or fees to foreign institutions, agencies, or sponsors should go to the Foreign Student Adviser with two copies of the sponsorship letter. Special billing authorization is required of students whose bills are to be sent to a third party for payment.

Other Courses

Degree candidates in good standing who are enrolled for a full-time program in the current term may register for one or two courses (except during the summer term) in any division of the University without charge by filing a formal change of program application approved by the Associate Dean for Student Affairs. These forms are then filed in the Office of Student Information Services (Black Building, Room 141). Consult the Office of Student Information Services for autumn and spring change-of-program dates.

Fees

The following fees, prescribed by statute, are in effect for 1990-1991 and are subject to change at the Discretion of the Trustees.

University charges such as tuition and fees and residence halls and board plans are due and payable in full by the date announced before the beginning of each term. The full amount of any charge may be paid when due without penalty, or payment may be made in installments. If partial payments are made, a **FINANCE CHARGE** is assessed on amounts not paid by the due date on the initial bill received prior to registration and thereafter as indicated on subsequent monthly bills. In either event, however, the student is required to sign a Retail Installment Credit Agreement at the time of registration which sets forth the terms and conditions of payment. All charges must be paid by the end of the term.

It is the policy of the University to withhold diplomas, certificates, and transcripts until all financial obligations have been met. Candidates for graduation are urged to pay their bills in full at least one month prior to graduation.

In the event a diploma, certificate, or transcript is withheld because of an unpaid bill, a student will be **required** to use a certified check, money order, or cash to release any of the aforementioned documents.

Tuition

For the full course in medicine for one academic year (or the equivalent), payable in two installments	$17,892

Health Service and Hospital Insurance Fees

The following fees, prescribed by statute, are subject to change at the discretion of the Trustees. For all full-time students, per year (September 1—August 31)

Health service	$500
Hospital insurance premium	413

The student health service fee contributes to the cost of operating the Student Health Service. The hospital insurance fee pays the annual premium to the Associated Hospital Service of New York. Participation in these programs is compulsory for all full-time students; students who already carry hospital insurance, however, will be charged the health service fee only. Proof of comparable coverage must be shown at the time of registration. Upon payment of additional fees, students can acquire hospital insurance coverage for their dependents and the latter are eligible to receive the benefits of the health service program. Students should consult the Student Health Service for further information on dependent coverage.

The Student Health Service, which holds daily office hours, is on the street level of Bard Haven Tower 1 (60 Haven Avenue).

Application Fees

For admission	$50.00
For late application, or late renewal of application, for a degree	50.00

Late Registration Fees

	Full-Time
During late registration	$ 50.00
After late registration	100.00

Withdrawal and Adjustment of Fees

A student in good academic standing who is not subject to discipline will always be given an honorable dismissal if he or she wishes to withdraw from the University. Withdrawal is defined as the dropping of one's *entire* program in a given semester as opposed to dropping a portion of one's program.

Any student withdrawing must notify the Office of Student Information Services in writing: failure to attend classes or notification of instructors does not constitute formal withdrawal and will result in failing grades in all courses. Any adjustment of the tuition that the student has paid is reckoned from the date on which the Office receives the student's written notification. Application fees, late fees, and special fees are not refundable.

In addition, at a minimum the following amount of tuition will be retained by the University:

Full-Time study	$75.00

After the first five business days following the beginning of each term, the above amount is retained **plus** an additional percentage of the remaining tuition (as indicated in the adjustment schedule below) for each week, or part of a week, that the student remains registered after these dates. The student is considered registered until the date on which written notice of withdrawal is received by the Office of Student Information Services. A student's financial assistance is adjusted to reflect reductions in the student's overall budget. Excess financial aid is restored proportionately to the funds from which it was drawn before a refund is given.

Adjustment Schedule

	Minimum Tuition Retained	*Percentage of Remaining Tuition Retained*
Up to and including dates specified above	$75	0
Following week	75	10
Second following week	75	20
Third following week	75	30
Fourth following week	75	45
Fifth following week	75	60
Sixth following week	75	75
Seventh following week	75	90
Eighth following week	75	100 (no adjustment)

Application or Renewal of Application for Degree

Degrees are awarded three times a year—in October, February, and May. A candidate for any Columbia degree (except the Ph.D. degree) must file an application with the Office of Student Information Services, 630 West 168th Street. The last day to file for an October degree is August

1; for a February degree, December 1; and for a May degree, March 1. (When the application date occurs on a Saturday or Sunday, the deadline becomes the next business day.) Fourth-year students usually apply during their last registration.
If the student fails to earn the degree by the conferral date for which he or she has made application, the student may renew the application for the following conferred date.

Requests for Transcripts

The Family Educational Rights and Privacy Act of 1974 as amended prohibits the release of educational records by institutions without the specific written consent of the student or alumnus. Students or alumni may request copies of their records by writing to the Office of Student Information Services, Columbia University, 141 Black Building, 630 West 168th Street, New York, N.Y. 10032.
There is a charge of $5 for each transcript requested singly, or $5 for the first copy and $1 for each additional copy requested at the same time. There is no charge for intrauniversity copies sent between University offices. Transcript requests are processed in the order received and require five to seven working days for processing. Specific deadlines should be mentioned, and checks accompanying requests should be made payable to Columbia University.

Estimated Expenses

Current educational expenses for a student attending the College during the *first academic year* are as follows:

Tuition	$17,892
Health and Hospitalization	913.00
Books and supplies	760.00
Microscope rental cost and other equipment	600.00

In addition to the educational costs listed above, each first-year student should budget approximately $8,520 to cover housing ($4,175), food ($2,810), clothing, laundry and dry cleaning ($480), and miscellaneous expenses ($1,055).

There are differences in the length of each academic year, and living and miscellaneous expenses vary. Each year the College Committee on Financial Aid prepares a statement of estimated expenses for students in each year of the medical school curriculum. These statements are given to all financial aid applicants at the time of distribution of the financial aid policy statement.

Microscope, Instruments, and Books

Students are required to have microscopes for courses in the first and second years of medical school. A microscope rental service is operated by the Medical Center Bookstore. For students who wish to purchase a new or used microscope, the faculty recommends a binocular instrument of standard make, complete with carrying case, built-in illuminator, and quadruple nosepiece (4X, 10X, 40X, and 100X oil-immersion objectives).

Students are required to purchase dissection equipment for the first-year course in gross anatomy and instruments for the diagnostic examination of patients.

The books required or recommended for courses of instruction are announced at the beginning of each academic year.

Housing

There are three types of housing available to incoming P&S students: *(a) University Residence Halls*—traditional "dormitory rooms" for single students, *(b) University Real Estate Management*

Properties—apartment accommodations owned and operated by the University for married students, and *(c) Off-Campus Housing*—rooms and apartments owned and operated by landlords other than the University and not subject to inspection or approval by the University.

University Residence Halls

All newly accepted single medical students who apply for housing are guaranteed an accommodation in UNIVERSITY RESIDENCE HALLS—Bard Hall. Bard Hall, located at 50 Haven Avenue overlooking Riverside Park and the Hudson River, is an 11-story facility which includes both a residence hall and student commons. The residence hall facility houses 305 students in single rooms. Each room is approximately 10′ x 13′. Many of the rooms are equipped with a sink. There is community shower and bathroom on each floor. The student commons includes a lounge, dining room, laundry, and athletic area. The newly-renovated Bard Athletic Club encompasses a 20-yard swimming pool, three squash courts, an exercise room, Nautilus and Universal equipment, stationary bicycles, rowing machines, lockers, showers, and saunas. The facility is handicapped accessible. Membership for students is free; users must have their I.D. cards validated with an athletic club sticker, obtainable from the Bard Operations desk or the Health Sciences Housing Office.

University Real Estate Management Apartments

All newly accepted married medical students who apply for housing are guaranteed a University Real Estate Management Apartment in Bard-Haven Towers. The Bard-Haven Towers complex includes three thirty-one-story, high-rise apartment towers. Each tower provides one, two, and three bedroom apartment accommodations. One bedroom apartments (line A&F) in Tower I have been reserved for married students. All apartments are unfurnished and include a full kitchen and bath. Gas, electricity, and telephone service are not included. Each building has laundry facilities, elevator service, and doorman service.

Off-Campus Housing

Student who seek Off-Campus Housing may utilize the Off-Campus Housing Inventory maintained in Room 253, Black Building.

Towers Waitlist

Single students who have received University Residence Halls housing in Bard Hall for their first year of medical school may apply for a University Real Estate Management Apartment in Bard-Haven Towers for their second or third year. There is a wait list for this type of housing. Applications for the Tower's Wait List are distributed by the Health Sciences Housing Office in late September.

All housing inquiries should be directed to: The Health Sciences Housing Office, Bard Hall, 50 Haven Avenue, New York, N.Y. 10032.

Disability-Related Services

Students with permanent or temporary disabilities who wish to request special arrangements are urged to notify the School's liaison officer for disability-related services as early as possible: Dr. Linda Lewis, P&S 3–401; (212) 305-3806. To allow adequate time for making such arrangements, please give at least eight weeks' notice before the start of the term involved. For taped texts or special housing arrangements, 3½ months' notice is needed. General questions about services, resources, wheelchair access, or student networking may be directed to Ruth Curtis, Coordinator of Disabled Student Services, 305 Low Memorial Library; (212) 854-6794.

Financial Aid

All financial aid awards are based on demonstrated need. Each applicant for financial aid is required to borrow a sum of money (unit loan) before becoming eligible for scholarships administered by the College. Financial aid awards are intended to supplement, rather than substitute for, the student's resources and parental contributions.

P&S participates in two scholarship programs that are usually awarded to students after the academic year has begun. Based on congressional appropriation, the Department of Health and Human Services (HHS) makes awards to participating medical schools for the EFN and FADHPS programs.

The Scholarship for Students of Exceptional Financial Need (EFN) is targeted for students of exceptional need, i.e., those who have zero or close to zero in financial resources and are preferably from a group that has traditionally been underrepresented in medicine. Since the program's inception, P&S has received from one to four awards annually (one last year). These funds will replace the unit loan, thus providing a one-time full scholarship for one or more students. In 1989–90 the EFN award helped three students.

The second HHS fund is the Financial Assistance for Disadvantaged Health Professions Students (FADHPS) scholarship. To be considered for this award, a student must come from an environment that inhibits individuals from obtaining the knowledge, skills, and abilities required to enroll in and graduate from a medical school, or the student must come from a family with an annual income below low-income thresholds, which are set according to family size by the U.S. Bureau of the Census. In addition, a student's resources (family contribution) must be $5,000 or less. The amount of FADHPS awarded to each eligible student will be determined by the Financial Aid Officer and will be contingent upon the number of eligible students, their degrees of financial need, and the amount of funds awarded to P&S. The funds will also be used to reduce part of the unit loan. In 1989–90 the average award was $2,250.

P&S also has approximately seven full-tuition scholarships. The recipients are selected primarily on the basis of need from the second-, third- and fourth-year classes during the Fall semester. Some of these scholarships were established by the Rhodebeck and Wolf families. A student may have this scholarship renewed if his or her need remains the same in subsequent years.

All students will automatically be considered for these special scholarships by completing a GAPSFAS form and by providing all required financial information.

Upon acceptance by the College, students receive the financial aid policy statement, loan interest and repayment information, and an application form which must be completed promptly. Students enrolled in the College are informed annually about the policies for the coming academic year and the dates for submission of the financial aid application and loan applications. Further information may be obtained from the Health Sciences Office of Student Financial Planning, telephone (212) 305-4100.

Spouses of medical students should consult the personnel offices of the College of Physicians and Surgeons and of the Presbyterian Hospital for information regarding employment opportunities at the Medical Center.

Scholarships

Students are urged to determine the availability of scholarship assistance from the states in which they reside and to make application for such funds when appropriate. As an example, New York State provides funds through the Tuition Assistance Program to residents who meet financial qualifications. In addition, New York State offers the New York Regents Health Care Scholarships for Medicine and Dentistry. Awards will go up to $10,000 per year. Applicants must be legal residents of New York State for one year prior to applying and be enrolled in a medical school or be candidates for admission to a medical school. Applicants must agree to practice medicine in an area of New York State designated as a shortage area. Awards will be made to eligible candidates in the following order of priority: (1) Candidate is economically disadvantaged and a minority group member historically under-represented in the profession, (2) Candidate is a minority group member under-represented in the profession, and (3) Candidate completed undergraduate work through assistance from the HEOP, EOP, SEEK, or College Discovery opportunity programs. Applications and instructions may be obtained from:

Loan Forgiveness and Professional Opportunity Scholarship Programs
Bureau of Higher and Professional Educational Testing
Cultural Education Center, Room 5C64
Empire State Plaza
Albany, New York 11230
(518) 474-6394

Applicants to medical school should also consult college premedical offices for information on the competitive New York State Regents Scholarships for Professional Study of Medicine. Applications are due between the October and February prior to matriculation. Students should be advised that these deadlines are strictly adhered to.

Among nongovernmental sources of funding there is the National Medical Fellowships, Inc., which awards fellowships to needy black Americans, American Indians, Mexican-Americans, and mainland Puerto Ricans. Applicants must be citizens of the United States. Awards are given to first- and second-year medical students. Enrolled medical students should apply to NMF at 254 West 31st Street, New York, N.Y. 10001 before March 1 for financial assistance for the second year of medical school. Applicants to medical school should request information from NMF.

The R.G. Haddad Foundation Scholarship is available for enrolled medical students who are United States citizens of Syrian or Lebanese descent. Applicants must have verified financial need. A grant for one year may be renewed upon application. The Financial Aid Office of the College of Physicians and Surgeons advises students of the availability of this scholarship annually.

There are a number of scholarship funds administered by the Financial Aid Office of the College. With the exception of the Lawrence John Durante Scholarship (see below), students do not apply directly for these scholarships. The named scholarships listed below have been donated by alumni, foundations, corporations, and friends of the University and are awarded to qualified students by the Financial Aid Office. Students are assured consideration for these funds by applying regularly for financial aid.

Foreign Students who do not Hold a Permanent Resident Visa

A major portion of a financial-aid package is the "Unit Loan." Most of our loan money comes from federally- or state-sponosored programs that require a borrower be either a U.S. citizen or a permanent resident. A student in the U.S. with an F1 or F2 student visa or with a J1 or J2 exchange visitor visa cannot receive student aid from federally- or state-sponsored sources but may qualify for and receive need-based school loans and grants from funds that are not federally- or state-sponsored.

Despite eligibility for school funds, nearly half the cost of four years of medical school must be borne by the student, his or her family, or by other sources such as government, foundation, or private support. Therefore, to assure the college of the student's ability to pay, it has been our custom to ask that funds that amount to approximately four years worth of tuition be deposited in an account by mid-July preceeding matriculation. Our estimate of the amount required to assure coverage of the cumulative tuition for the class entering in September 1990 is $68,000 (assuming interest earnings are reinvested).

We understand that some students may have difficulty providing the tuition deposit in full in advance of matriculation. Therefore, the student may instead elect the following option: No later than one week prior to the first day of class each year, the full cost for that year (as determined by the Financial Aid Officer) must be in an account at a bank acceptable to Columbia University. Adjustments to this amount can be made only if, after having completed the financial-aid application packet in a timely manner, a University loan and/or a P&S Grant is awarded. In either case, the amount of the deposit for the year may be reduced by the amount of aid awarded.

For those students applying for consideration for school funds, the expected parental contribution will also include that portion of the "unit loan" that would normally be available from federally- or state-sponsored programs. Thus, a foreign student would be eligible for only the school-loan portion of the unit loan and for grants if need is demonstrated.

Tax Withholding for Nonresident Alien Scholarship and Fellowship Recipients

United States tax law requires the University to withhold tax at the rate of 14 percent on scholarship and fellowship grants paid to nonresident aliens that exceed the cost of tuition, books, fees, and related classroom expenses.

Certain countries have entered into tax treaties with the United States that may serve to reduce this rate of withholding. However, even when such a treaty applies, the student and the University must report the full amount of such excess to the Internal Revenue Service. If a student claims tax treaty benefits, he or she must also report this amount to his or her country of residence.

The International Student Office (208 Lewisohn; telephone 212-854-3591) has prepared a packet of tax information that is available to students and is revised annually. The tax law is complex and may vary with regard to individual circumstances. Therefore, as the University is not in a position to offer individual tax advice, each student may also wish to consult the consulate of his or her country of residence or a qualified tax professional.

Endowed Scholarship Funds

ALLEN Gift of Mrs. Vivian B. Allen.

ANONYMOUS Several; awarded annually.

BANBURY From the Banbury Scholarship Fund.

ALICE IDA BERNHEIM '31 AND ABRAHAM PENNER '31 SCHOLARSHIP FUND For tuition.

ISAAC J. AND RENA HENLY BERNHEIM Given by the family in honor of Isaac J. and Rena Henly Berheim.

ELSIE J. BIRTWHISTLE Founded by the will of Morell Birtwhistle, in memory of his wife.

GEORGE BLUMENTHAL, JR. From the George Blumenthal, Jr., Fund.

ELIZABETH ROCK BRACKETT '29 SCHOLARSHIP FUND Bequest of Dr. Brackett, the income to be used for scholarship assistance for women medical students studying under the Faculty of Medicine.

DANIEL NOYES BROWN SCHOLARSHIP FUND Established in honor of Daniel Noyes Brown, P&S '32.

LUCIEN AND ETHEL BROWNSTONE MERIT MEDICAL SCHOLARSHIP FUND A merit scholarship awarded every four years.

DR. MOSES R. BUCHMAN MEMORIAL Open to undergraduate medical students, with preference given to those who are residents of Westchester and who plan to practice pediatrics. Established by friends of Dr. Buchman.

DAVID C. BULL MEMORIAL In memory of Dr. David C. Bull, a former member of the Department of Surgery.

DR. H. GRIFFIN BULLWINKEL '20 AND MRS. LOLA LENHART BULLWINKEL FUND Given by Mrs. Bullwinkel in memory of her husband, Columbia College Class of 1917, P&S Class of 1920.

RICHARD BUTLER Open to men born in the state of Ohio who are qualified for admission to, and plan to enter, Columbia College, the Graduate School of Arts and Sciences, the School of Law, the School of Engineering and Applied Science, or the College of Physicians and Surgeons.

LISLE C. CARTER SCHOLARSHIP FUND Establishing through the generosity of the Emilie H. Siebert Trust, for disadvantaged minority students.

CHEEK (DR. JOANNE LLOYD-JONES) SCHOLARSHIP FUND Gift of Mrs. Arthur Rudd. Established in 1987.

ALONZO CLARK 1835 Founded by the will of Alonzo Clark, M.D., LL.D., for many years president of the College of Physicians and Surgeons.

CLASS OF 1890 Given by a member of the class.

CLASS OF 1899 Given by the class in commemoration of the thirty-fifth anniversary of its graduation.

CLASS OF 1912 Given by the class on the fifteenth anniversary of its graduation.

CLASS OF 1913 For medical student scholarships

CLASS OF 1920 Given by the class on the twenty-fifth anniversary of its graduation.

CLASS OF 1924 To commemorate the fiftieth anniversary of their graduation.

CLASS OF 1928 Given at their tenth reunion.

CLASS OF 1932 For a scholarship room. Given by the class on the twenty-fifth anniversary of its graduation.

CLASS OF 1933 For a scholarship.

CLASS OF 1934 Awarded for medical student scholarships.

CLASS OF 1936 Given by the class on the twenty-fifth anniversary of its graduation.

CLASS OF 1937 Awarded for tuition of medical students.

CLASS OF 1938 Awarded annually to assist a student in the College of Physicians and Surgeons.

CLASS OF 1939 Awarded for medical student scholarships.

CLASS OF 1940 Awarded for medical student scholarships.

CLASS OF 1942 Awarded for medical student scholarships.

CLASS OF 1952 Given by members of the class on the tenth anniversary of its graduation.

CLASS OF 1953 Given by members of the class.

CLASS OF 1954 Given by members of the class.

CLASS OF 1958 Given by members of the class.

CLASS OF 1959 Given by members of the class.

CLASS OF 1964 Established in memory of Dr. Howard Gerstel.

CLASS OF 1965 Given by members of the class.

HENRY D. CRUGER Request of Helen Cruger, in memory of the Henry D. Cruger family.

CHARLES A. DANA FOUNDATION, Inc. Established by the Foundation.

ANTHONY M. DeANGELIS '34 Open to a student of the fourth-year class. Given by Dr. Anthony M. DeAngelis.

HORACE DENNETT Open to students in the third- and fourth-year classes.

DR. HERBERT JACKSON DESHON '30 SCHOLARSHIP FUND Established by bequest of Dr. DeShon, P&S '30.

DAVID M. DEVENDORF 1861 Preference is given to a candidate from Herkimer County, New York, preferably one from the town of Herkimer. Given by Mrs. David M. Devendorf of Herkimer, New York, in memory of her husband, Dr. David M. Devendorf, Class of 1861.

MORRIS DINNERSTEIN '18 SCHOLARSHIP FUND

FRANCIS E. DOUGHTY 1869 Given by Miss Phoebe Caroline Swords, in memory of Dr. Francis E. Doughty, Class of 1869.

LAWRENCE JOHN DURANTE '61 Given by members of the Class of 1961, in memory of Lawrence John Durante. Awarded annually to a senior student with verified financial need by the Durante Scholarship Fund Committee after review of the applications of qualified students.

EDWARD PERCY EGLEE '13 Bequest of Edward Percy Eglee, Class of 1913, member of the Faculty of the College of Physicians and Surgeons from 1919 until his retirement in 1953, when he was a clinical professor of medicine.

JOSEPH HERMAN AND HANNAH EICHNER Established by the will of Benjamin Bernard Eichner, Class of 1919.

JOSEPH C. FOSTER Given by Mrs. Esther J. Foster, in memory of her husband.

VIRGINIA KNEELAND FRANTZ '22 Bequest of Dr. Frantz.

NELLIE ALDEN FRANZ Bequest of Nellie A. Franz to Columbia University for scholarships to worthy young women for undergraduate or graduate study, with preference for those interested in medicine, nursing, sociology, and journalism.

JOSEPH H. FRIES '29 MEMORIAL SCHOLARSHIP

DAVID GABERMAN '20 SCHOLARSHIP FUND

ARTHUR AND CORNELIA GANS SCHOLARSHIP FUND Bequest of Cornelia Gans to the College of Physicians and Surgeons to provide scholarships for needy and worthy students of American or Dutch nationality.

FRANK J. GILLESPIE Bequest to provide loans to students showing promise in surgery.

GEORGE AND CHARLIE Given by the Alumni Association of the College, in memory of George Peters and Charles Costello, long-time employees of the Medical Center.

ROBERT I. GRAUSMAN '21 SCHOLARSHIP FUND Established by Grausman, P&S '21, and continued in his memory by family and friends.

JACOB HARSEN Given by Dr. Jacob Harsen.

FRANK HARTLEY 1880 Given by friends and colleagues of Dr. Frank Hartley, class of 1880.

HELEN HAYES Established by the College of Physicians and Surgeons to honor Miss Hayes for her four decades of service and devotion to the Helen Hayes Hospital, a New York State-owned Columbia affiliate.

HAROLD HELM Established by the College to honor Mr. Helm, for his statesmentship and leadership as a chairman of the Medi/Center I campaign and for all his efforts on behalf of the University.

WILLIAM H. HEMINGWAY

JEAN HENDERSON '21 MEMORIAL SCHOLARSHIP FUND

AARON HIMMELSTEIN MEMORIAL Open to undergraduate medical students. Given by Dr. Himmelstein's friends and colleagues.

IRMA T. HIRSCHL SCHOLARSHIPS From the estate of Irma T. Hirschl. Awarded on the criteria of financial need, outstanding scholarship and dedication to medical science, the easing of pain and protection of life.

MADAME LEIN-SUN HO SCHOLARSHIP FUND Established by Dr. Karen K. Fu, P&S '67, in memory of her mother.

CHARLES EUGENE HUBER, SR. 1896 Bequest of Francis D. Huber, Class of 1928, in memory of his father.

FRANCIS HUBER '28 Open to a graduate of any institution other than Columbia University, City College, Barnard College, or Hunter College. Given by Dr. Francis Huber, Class of 1928.

VIOLA B. HUBER Open to a graduate of Hunter College. Given by Dr. Francis Huber.

ABRAHAM JACOBI For graduates of Columbia University and City College. Given by Dr. Francis Huber, in memory of Dr. Abraham Jacobi.

EDWARD R. JEAL Awarded to deserving students under the Faculty of Medicine.

CHARLES CHRISTIAN LIEB '06 Awarded to a student interested in the study of pharmacology. Given in memory of Dr. Charles Christian Lieb, Hosack Professor of Pharmacology.

LI MING Awarded with preference to students of Chinese birth or descent or nationality. Established by bequest of Mr. Li Ming.

MARJORIE McANENY Open to a graduate of Barnard College. Given by Dr. Francis Huber, Class of 1928.

ELIZABETH HALL McCULLOGH '33 Given by Mrs. William G. Heaphy, in memory of her sister, Dr. Elizabeth McCullogh, an alumna of the College of Physicians and Surgeons, Class of 1933.

MALCOLM X SCHOLARSHIP FUND Established by the College of Physicians and Surgeons to help further the education of black students interested in medical and public health problems prevalent in black communities.

HERBERT D. MANLEY '07 Given as bequest by the late Dr. Herbert D. Manley.

FRANCIS HARTMAN MARKOE Given by Madeline Shelton Markoe, in memory of her husband.

M. MONTGOMERY MAZE From the estate of M. Montgomery Maze, Pearl River, N.Y. Part of this fund may be used for scholarships and/or fellowships, preferably for graduates of the Pearl River High School.

MABEL C. MEAD Awarded to women students of Chinese ancestry. Preference given to those desiring to study medicine.

VIVIAN AND SEYMOUR MILSTEIN ENDOWMENT FOR SCHOLARSHIPS Established by the donors in honor of their friends and physicians, Drs. David Habif '39 and Duane Todd '52.

SAMUEL J. MORITZ MEMORIAL Given by the executors of the estate of Samuel J. Moritz.

GULLI LINDH MULLER '21 Bequest of the donor to be awarded with preference to a gifted woman student.

P&S SCHOLARSHIP AID AND LOAN FUND Established by the wives of the members of the Faculty of Medicine, faculty, and friends of the College.

RUDOLPH AND MARY E. PFEIFFER Given by Mrs. Mary E. Pfeiffer.

TOUSSIA AND KERMIT PINES '42 SCHOLARSHIP FUND Endowed by Florence and Herbert Irving.

PRESBYTERIAN HOSPITAL ALUMNI SCHOLARSHIP Granted with preference to sons or daughters of alumni of Presbyterian Hospital. Given by the Society of the Alumni of Presbyterian Hospital.

WILLIAM COLE RAPPLEYE Established at the retirement of Dean Rappleye.

RICHARD RHODEBECK Given by Mrs. Richard Rhodebeck, in memory of her husband.

JAMES RODISH MEMORIAL SCHOLARSHIP Established by family and friends in memory of James Rodish, to be awarded in alternate years to a student in the School of Nursing and a student in the College of Physicians and Surgeons.

DAVID H. ROUS From family, friends, and business associates of David H. Rous, the income to be divided equally among the Graduate School of Business, Columbia College, and the College of Physicians and Surgeons.

SAGAMORE Awarded to needy students.

JOSEPH E. SAPHIR '02 MEMORIAL Given by Elsa M. Saphir, in memory of her husband, Joseph F. Saphir, Class of 1902.

THE MARY S. SAXE SCHOLARSHIP FUND Bequest of Mary S. Saxe.

AURA E. SEVERINGHAUS Given by faculty members, alumni, and students, in honor of Dr. Severinghaus' services to the College.

BERNARD E. SMITH MEMORIAL Given by Mrs. Gertrude Smith, in memory of her husband.

THE JAMES A. STEVENSON '43 MEMORIAL SCHOLARSHIP Established by Mrs. Ann Stevenson Hardesty, in memory of her brother James Albert Stevenson, Class of 1943.

EDGAR EGINTON STEWART, JR., MEMORIAL Given by Dr. E.E. Stewart, Class of 1906, in memory of his son.

ARTHUR PURDY STOUT MEMORIAL Given by the Arthur Purdy Stout Society.

ARNOLD STURMDORF Awarded to one or more students in their third or fourth years of medical school. Bequest of Miriam Sturmdorf.

DAVID TORNBERG '73 SCHOLARSHIP ENDOWMENT FUND

P. ROY VAGELOS '54 AND RANDALL VAGELOS '83 ENDOWMENT SCHOLARSHIP

HAROLD S. VAUGHAN '04 Bequest of Dr. Harold Vaughan, Class of 1904.

ANDREA VICALE MEMORIAL Established by Dr. Carmine T. Vicale, in memory of his father.

HERMANN VOLLMER Established in his memory by his wife.

THEODORE L. VOSSELER Preference is given to graduates of Colgate University. Given by Dr. Allison J. Vosseler, Class of 1933, in memory of his father, Dr. Theodore L. Vosseler.

ROBERT M. WECHSLER '45 Given by Dr. I.S. Wechsler, in memory of his son, Robert M. Wechsler, Class of 1945, and by members of the Class of 1945, in memory of their classmate.

WHITING—Dr. FORDYCE B. St. JOHN '09 SCHOLARSHIP FUND Gift by the Mrs. Giles Whiting Foundation, in honor of Dr. Fordyce B. St. John.

DR. JAMES LANCELOT WILSON '16 Awarded to a student selected by the College of Physicians and Surgeons.

LYDIA AND DAVID WOLF SCHOLARSHIP FUND Given by Mr. and Mrs. Wolf to support a needy student of high academic standing and promise.

JOHN C. WOOD, JR. '76 MEMORIAL Established by family and friends in memory of Dr. Wood, Class of 1976.

WORTHAM '43 (MARION H. AND EDWIN III) MEMORIAL SCHOLARSHIP FUND

Gift Funds

ANONYMOUS SCHOLARSHIP '65

BALSO P&S ALUMNI SCHOLARSHIP

VALERIE AND GEORGE DELACORTE FOUNDATION Annual gift.

EATON '83 MEMORIAL

GENERAL SCHOLARSHIP GIFT FUND Gifts and memorials by various donors.

HARLOW KEITH HAMMOND TRUST SCHOLARSHIP FUND

CHARLES F. IKLE SCHOLARSHIP AND RESEARCH FUND Grant by the New York Community Trust.

JAMES T. LEE FOUNDATION, Inc. Annual grant to medical students.

RICHARD P. NESTI '61 SCHOLARSHIP

P&S ALUMNI SCHOLARSHIP

LOUIS AND RACHAEL RUDIN. Established by the Rudin Foundation for students of excellence who would not otherwise be able to complete their education.

AURA E. SEVERINGHAUS Established by the Clark Foundation as an unrestricted, discretionary fund to be used primarily for the support of students and student activites. Priority given to fourth-year students who are subjected to increased living and transportation costs because of electing clerkships at the Mary Imogene Bassett Hospital, Cooperstown, N.Y.

JULIUS E. STOLI MEDICAL EDUCATION AND RESEARCH FUND SCHOLARSHIP

THE SULZBERGER FOUNDATION Annual gift by Judith Sulzberger '49. Awarded to senior students with very good academic records, significant financial need, and plans to pursue careers in family medicine or general internal medicine in nonurban areas.

THORNTON SCHOLARSHIP

UNITED DOCTORS OF HARLEM HOSPITAL Annual gift awarded to entering minority students from the metropolitan area.

RALPH J. VEENEMA SCHOLARSHIP

Loans

Loans are available to all full-time medical students. These funds are provided by various sources, including the federal and state governments, the University, and also private agencies, as outlined below.

Foreign students who hold an F-1 student visa are eligible to borrow only from University funds and must have comakers who are citizens or permanent residents of the United States. Comakers should not be University employees. Foreign students may borrow from federal or state loan funds upon being granted permanent resident visa status in the United States.

Health Professions Student Loans. Funds were originally allocated by the Bureau of Health Manpower of the Department of Health and Human Services to individual medical schools, which are responsible for determining both the recipients of such funds and the amounts to be loaned. Assuming the availability of adequate funding, the maximum loan to a student in an academic year is the cost of tuition plus $2,500. Loans are repayable to the school over a ten-year period beginning one year after completing or interrupting the prescribed full-time course of study. Interest at the annual rate of 5 percent begins to accrue when the loan becomes repayable.

Repayment of Health Professions Loans may be *deferred* up to three years for those who become members of a uniformed federal service on sustained full-time duty (i.e., the Army, Navy, Air Force, Marine Corps, Coast Guard, Coast and Geodetic Survey), the Public Health Service, or the Peace Corps. For those pursuing advanced professional training, repayment may be deferred to completion of the training program, except for a cap of two years' deferment during a Fellowship. Interest does not accrue during period of deferment.

Health Professions Loans are *forgiven* or *cancelled* under certain conditions: (1) In the instance of students who agree to practice medicine for at least two years in a region of a state that has been determined to need additional personnel, the federal government will repay 60 percent of the outstanding principal and interest on any educational loan(s) for the cost of professional education. For a third year of practice in such an area, an additional 25 percent of the loan(s) will be repaid. (2) The outstanding loans of students who fail to complete their health professions studies will be repaid if they are in exceptionally needy circumstances, from a low-income or disadvantaged family, and cannot be expected to resume studies within two years. (3) Loans of students who die or suffer permanent and total disability will be cancelled. Repayment of loans for service in shortage areas is subject to annual allocation of funds from the federal government.

Perkins Loans. Funds are allocated by the Department of Education to schools which are responsible for determining both the recipients of such funds and the amounts to be awarded. The total (undergraduate and graduate school loans) available to a student from the program is $18,000. The current interest rate, payable during the repayment period, is 5 percent on the unpaid principal. Repayment begins six months after graduation or after leaving school. The repayment period may extend up to ten years. Repayment may be deferred for up to three years during active U.S. military service, during service in the Peace Corps or Volunteers in Service to America (VISTA), during service in the National Health Service Corps, or for up to two years during service in an internship required to begin professional practice.

Stafford Loans. Under the auspices of the Office of Student Financial Assistance of the Department of Education, federally insured loans are available to students with demonstrated financial need. The loans are made by authorized banks, savings-and-loan associations, credit unions, pension funds, and insurance companies. The maximum loan each academic year under this program is $7,500, and the total outstanding loan balance at any one time may not exceed $54,750. Lending institutions participating in this program can provide information regarding interest rates, repayment, and deferment of repayment.

Supplemental Loan for Students is a federally insured loan program available to graduate students, who may borrow up to $4,000 a year at a variable rate of interest, with a cap of 12 percent. In 1989–90, the interest rate was 12 percent. Repayment of the principal is deferred while students are in school full time, but interest accrues while enrolled. Since authorized deferments are similar to those for the Stafford loan program, a student may continue to pay interest until defer-

ments expire, beginning repayment of both principal and interest following that period. The aggregate indebtedness for graduate students is $20,000 under this program. This loan must be taken at the same bank as the Stafford loan if a student borrows a Stafford loan in New York State. This rule may also apply in other states. Students who are not New York State residents should be able to make an SLS loan at a bank in New York if they are unable to borrow from their local lender.

Health Education Assistance Loans. HEAL is a federally insured loan program available to students in the health professions. Currently, all HEAL lenders use a promissory note with a variable interest rate. The rate is reassessed quarterly and is calculated by taking the interest rate on the ninety-one day Treasury Bill plus an additional 3 percent. Interest on this loan begins to accrue immediately. There is a nine-month grace period after graduation. However, if the borrower becomes an intern or resident in an accredited program before that date, repayment will begin from nine to twelve months after the borrower exhausts the deferments for internships and residency (four years maximum) or fellowship (two years maximum) or ceases to be an intern or resident. Certain HEAL loan programs offer better interest rates and do not compound while the student is in school. Please contact the Financial Aid Office about these loans.

P&S Dean's Loan. The Dean's loan fund is a program established by the College to offset the burden of high interest loans to students with a high degree of demonstrated financial need. The interest rate is 9 percent and does not accrue while the student is in school or postgraduate training.

University loan funds are also intended to supplement students' resources when monies are available. Included among these are the following funds:

PETER AMAZON '21 Bequest of Peter Amazon.

LEONARD ALEXANDER ARMS Bequest of Lydia B. Arms, in memory of her husband, to create a revolving loan fund for scholarship and research to medical students and graduate students at P&S.

GEORGE BLUMENTHAL, JR. Used for the assistance of needy students in the medical school.

DR. HARRY BRITENSTOOL '01 MEMORIAL From the estate of Mrs. Blanche B. Ostheimer, in memory of her brother.

CLASS OF 1906 Gifts from various members of the Class of 1906.

CLASS OF 1919 Gifts from various members of the Class of 1919. To be used for loans to deserving students.

CAROL ELISSA GARDNER '41 Established by Dr. M. Jordan Thorstad, in memory of his wife, Dr. Carol Elissa Gardner Thorstad, Class of 1941.

FRANK J. GILLESPIE FUND From the estate of Frank J. Gillespie. To be used for medical students interested in the field of surgery.

DAVID GREENE A bequest from the state of Fannye Greene Meyerson, in honor of her brother, Dr. David Greene. Used for assistance of needy students in the medical school and Columbia College.

GEORGE L. HAWKINS, Jr. '41 Gift of George L. Hawkins, Jr., Class of 1941.

B. H. HOMAN, JR., REVOLVING LOAN FUND Long-term, low-interest loans for needy students.

WILLIAM AND ROSE KEYBURTZ SCHOLARSHIP LOAN FUND Established by bequest of Dr. Orland L. Keyburtz in honor of his parents.

ROBERT ABBE MACKENZIE '21 Established by friends, colleagues, and patients of Dr. MacKenzie, an alumnus of the Class of 1921.

GEORGE W. MERCK MEMORIAL Established by the Merck Company Foundation in honor of George W. Merck. For graduates of P&S who need to move more than 300 miles from New York City for their residency training.

HENRY NIAS FOUNDATION LOAN FUND Gift of Stanley Edelman, Class of 1953.

JESSIE SMITH NOYES

P&S SCHOLARSHIP AND LOAN ENDOWMENT FUND Given by P&S alumni.

WALTER C. AND MAJORIE C. STEIN Bequest of Marjorie C. Stein.

STEINHARDT MEDICAL SCHOLARSHIP Bequest of Samuel C. Steinhardt. Awarded to graduates of one of the colleges of the City University of New York who have attended public schools exclusively (except for religious instruction). To be repaid in fifteen years; without interest for the first ten years; with 5 percent annual interest thereafter on the unpaid balance.

MRS. AND DR. CLYDE WU, P&S '56 STUDENT LOAN ENDOWMENT

In addition to the foregoing, periodically there are funds for short-term emergency loans, which are administered through the Health Sciences Office of Student Financial Planning.

Prizes

Dr. HARRY S. ALTMAN PRIZE Awarded to an outstanding senior student who demonstrates a special interest in pediatric ambulatory care. Established to honor Dr. Harry S. Altman, in recognition of his outstanding contributions to scholarship in pediatrics.

ALUMNI ASSOCIATION AWARD Given for outstanding achievement.

VIRGINIA P. APGAR '33 AWARD Awarded to an outstanding graduate student for excellence in completing an advanced course in anesthesiology and intensive care. Established by the Department of Anesthesiology in honor of Virginia P. Apgar, Class of 1933.

MICHAEL H. ARANOW AWARD Awarded to the student who exemplifies the caring and humane qualities of the practicing physician.

HERBERT J. BARTELSTONE AWARD IN PHARMACOLOGY Awarded to a member of the graduating class of the College who has demonstrated exceptional accomplishments in pharmacology. Established to honor the memory of Professor Herbert J. Bartelstone, member of the Department of Pharmacology from 1950 until 1973, dedicated and inspiring teacher, and uncompromising advocate of the importance of rigorous preparation in basic medical science in the education of the physician.

ALVIN BEHRENS MEMORIAL FUND AWARD of the Phi Lambda Medical Fraternity Given to an able student planning a career in ophthalmology.

DR. ROBERT BERTSCH AWARD Established by Dr. Bertsch's colleagues in the Department of Surgery to perpetuate the memory of this esteemed physician and dedicated teacher; to be awarded to a graduating student who best typifies the aims and ideals of this devoted surgeon.

COAKLEY MEMORIAL PRIZE Awarded by the Department of Otolaryngology to a senior student who has done outstanding work in the field.

TITUS MUNSON COAN PRIZE Awarded to the senior student who has submitted the best essay in biological science or otherwise best contributed to its advancement. Bequest of Titus M. Coan.

THOMAS F. COCK, M.D., PRIZE Awarded to a senior student for excellence in obstetrics and gynecology.

ROSAMOND KANE CUMMINS '52 AWARD Established by the Alumni Association for excellence in orthopedic surgery, to be given to a member of the graduating class who has demonstrated those special qualities of mind and heart that mark the comforter and healer.

FREDERICK PARKER GAY MEMORIAL AWARD Awarded to the senior student whose work in microbiology is judged the most outstanding. Given by Mrs. Frederick Parker Gay, in memory of her husband.

LOUIS GIBOFSKY MEMORIAL PRIZE Awarded to a senior student who submits the best research paper in nephrology, dialysis, transplantation, or immunobiology. The award is in memory of Louis Gibofsky.

THE DOCTOR CHARLES E. HAMILTON '81 AWARD Established by Mr. Andrew L. Giffuni to honor Dr. Hamilton, P&S Class of 1918, for excellence in pulmonary diseases.

JANEWAY '27 PRIZE Awarded to the student graduating from the College with the highest marks for achievement and ability. Given by the bequest of Matilda S. J. Wisner.

Dr. HAROLD LAMPORT '34 BIOMEDICAL RESEARCH PRIZE Awarded to a senior student for the best thesis reporting original biomedical research. Gift of the Lamport Foundation.

JOHN K. LATTIMER PRIZE IN UROLOGY Awarded to senior students for the best essays on urological subjects.

LEMMON COMPANY STUDENT AWARD Given to a graduating student who has excelled in the study of obstetrics and gynecology or family practice.

ROBERT F. LOEB AWARD Awarded to a senior student who, in the opinion of the Department of Medicine, has shown the greatest promise of excellence in clinical medicine. Established in memory of Dr. Robert F. Loeb, Bard Professor of Medicine, and chairman of the Department of Medicine from 1947 to 1959.

F. PHILIP LOWENFISH PRIZE IN DERMATOLOGY Awarded to the individual who has done the most creative and original research in dermatology. Given by Mrs. Lowenfish, in her husband's memory.

ADMIRAL DAVID WILLARD LYON AWARD Awarded to a senior student on a military scholarship for outstanding academic achievement. Established by Dr. Edgar Housepian, Class of 1953, and Mrs. David Willard Lyon in Memory of Admiral Lyon.

DOCTOR CECIL G. MARQUEZ BALSO STUDENT AWARD FOR EXCELLENCE Awarded to a graduating minority medical student for his/her outstanding contribution to the Black and Latin Student Organization and the minority communities.

EDITH AND DENTON McKANE MEMORIAL AWARD Bequest of Edith U. McKane. Awarded to a senior student for excellence in basic or clinical research in ophthalmology.

Dr. HAROLD LEE MEIERHOF '17 MEMORIAL AWARD Awarded on recommendation of the professor of pathology to the student who has done the best work in the field during the four years of medical school. Given by the parents of Dr. Harold Lee Mierhof, Class of 1917.

MARIE NERCESSIAN MEMORIAL AWARD Gift of Ohannes Nercessian, Class of 1981. Awarded to a senior medical student (preferably of Armenian descent) who has shown care, unusual concern, and dedication to helping sick people.

NEW YORK ORTHOPEDIC HOSPITAL AWARD An annual prize awarded to a senior student upon nomination by the Department of Orthopedic Surgery, for outstanding performance in the field.

JOSEPH GARRISON PARKER '48 AWARD Awarded to the senior in the College who best exemplifies, through a continued personal interest and activities in art, music, literature, or the public interest, the fact that Living and Learning go on together. Given by Dr. and Mrs. Philip Parker, in memory of their son, Joseph, Class of 1948, whose promising career in medicine was cut short by death in 1953, but in whose life the love of music and the arts was a constant source of inspiration.

P&S CLASS OF 1924, Dr. ALLEN O. WHIPPLE MEMORIAL PRIZE Awarded to a senior student, upon nomination of the Department of Surgery, for outstanding performance in the field.

DEPARTMENT OF PSYCHIATRY PRIZE Awarded by the Department of Psychiatry to a second-year student for the best work in psychopathology.

SAMUEL W. ROVER AND LEWIS ROVER AWARD IN ANATOMY AND CELL BIOLOGY An annual prize to be awarded to a graduating medical student or graduate student for scholarship and outstanding achievement in research in anatomy and cell biology.

SAMUEL W. ROVER AND LEWIS ROVER AWARD IN BIOCHEMISTRY An annual prize to be awarded to a graduating medical student or a male graduate student for scholarship and outstanding achievement in biochemistry at the College of Physicians and Surgeons.

SAMUEL W. ROVER AND LEWIS AWARD IN GENETICS AND DEVELOPMENT An annual award to a graduating student or graduate student, who in scholarship and proficiency achieves the greatest distinction in genetics and development.

SAMUEL W. ROVER AND LEWIS ROVER AWARD IN PHYSIOLOGY An annual prize to be awarded to a graduating medical student or graduate student for scholarship and outstanding achievement in research in physiology.

THE SANDOZ AWARD Awarded to a graduating student for excellence in research.

THE REBECCA A. SCHWARTZ MEMORIAL PRIZE Given by Dr. and Mrs. Stephen Schwartz, Class of 1937, in memory of their daughter, to be awarded to an outstanding student on a pediatric cardiology elective.

HELEN M. SCIARRA PRIZE Awarded to a senior student in the College for outstanding work in neurology.

THE MIRIAM BERKMAN SPOTNITZ PRIZE Given by Dr. Hyman Spotnitz '39 in memory of Mrs. Spotnitz for outstanding research in the field of oncology.

Dr. ALFRED STEINER '38 AWARD Presented annually to one or more students chosen by a faculty committee on the basis of achievement in medical research. Funded by Harcourt Brace Jovanovich in honor of Dr. Steiner.

UPJOHN ACHIEVEMENT AWARD For excellence in research by a graduating student.

Dr. WILLIAM PERRY WATSON PRIZE IN PEDIATRICS Awarded on the nomination of the professor of pediatrics to that member of the graduating class of the College who has shown the most notable work in the study of diseases of infants and children.

Dr. WILLIAM RAYNER WATSON AWARD Awarded to that member of the graduating class who has done the most outstanding work in psychiatry during the four years of attendance at the College of Physicians and Surgeons.

SIGMUND L. WILENS PRIZE Awarded to a member of the graduating class who, in the opinion of the Department of Pathology, has been distinguished by special excellence in pathology. Gift of Dr. Marie Renate Dische Wilens, Class of 1957, in memory of her husband, Dr. Sigmund L. Wilens.

Student and Alumni Activities

All students enrolled by the College enjoy the privileges and facilities of the University campus, including the University libraries.

P&S Club

The P&S Club was founded over eighty years ago by John R. Mott, who later won the Nobel Peace Prize. The Club is the most active and comprehensive student organization in American medical education today. All matriculated students in the College of Physicians and Surgeons are members, eligible to participate in extracurricular activities of their choice. Under the guidance of the Faculty Advisory Board, the student cabinet, led by the president, assumes the entire responsibility for management of the Club. The cabinet consists of four elected members from each class and those who chair the following committees: Orientation, Handbook, Student-Faculty Home Visits, Films, Concerts, Choral Society, Bard Hall Players, Outing Club, Winetasters, Athletics, Community Youth Work, Accessories, Social, and Columbia-Presbyterian Medical Society.

Alpha Omega Alpha Honor Medical Society

A chapter of Alpha Omega Alpha, the national honor medical society, was founded at the College of Physicians and Surgeons in 1907. Students are elected to membership in the senior year by a committee of the faculty appointed by the Dean. The committee is chaired by the Alpha Omega Alpha Councilor of the College of Physicians and Surgeons. Student membership is determined according to the constitution of the national society. Election is limited to those whose scholastic qualifications place them in the upper 25 percent of the class. The number of student members elected from any class may not exceed one-sixth of the number expected to graduate in that class. Although scholastic excellence is required for membership, integrity, capacity for leadership, compassion, and fairness in dealing with one's colleagues are judged to be of equal significance.

P&S Alumni Association

The P&S Alumni Association serves to foster and maintain cordial relationships between the College of Physicians and Surgeons and its alumni. Liaison with the College is facilitated through the office of the Assistant Dean for Alumni Affairs.

Regular members of the Alumni Association include all those awarded the M.D. or Med.Sc.D. degrees from the College, as well as all Ph.D. graduates of the basic sciences curricula at P&S and those awarded the Certificate in Psychoanalytic Medicine. Associate members include faculty members of the College, all house staff members and visiting fellows at hospitals affiliated with P&S.

The work of the Alumni Association is accomplished through the efforts of its officers and members of the fifteen standing and *ad hoc* committees, all of whom form the constituency of the P&S Alumni Council. Among the important functions of the Association is participation in the publication of P&S, a magazine that is cosponsored by the alumni and the medical school and serves as a major form of communication between the school and its alumni, faculty, students and their parents, and other friends and associates of the College.

Restricted revenues raised by the Alumni Association provide funds for the student dormitory and scholarships at the College of Physicians and Surgeons. Unrestricted revenues allow the College flexibility in applying funds to areas of greatest need. Traditionally, a substantial stipend from unrestricted revenues goes to the P&S Club as well as to scholarship aid.

As future alumni, students play an important role in the work and deliberations of the Alumni Association. Through their membership on the Student-Alumni Relations Committee, students and alumni work together in addressing students' needs and concerns.

Information about the Alumni Association and its activities is available from the P&S Alumni Relations Office, 2005-C Black Building, 630 West 168th Street, New York, N.Y. 10032. Telephone (212) 305-3498.

The Program of Instruction

The first-year curriculum is largely devoted to basic science courses with correlation clinics to demonstrate the application of scientific information to the practice of medicine. The first-year student also studies the impact of health care systems in our current society on the individual patient and physician. Second-year courses concentrate on the clinical relevance of basic science concepts as the bridging process to clinical instruction begins. Correlations between pathology and pathophysiology are emphasized. The development of basic clinical skills begins in the second semester and culminates in a four-week clerkship. Throughout both preclinical years elective opportunities are available for pursuit of areas of interest.

The major clinical year is devoted exclusively to rotations on clerkships in the clinical disciplines. Under close supervision the students are helped to develop the skills and knowledge required for the practice of clinical medicine. Students learn to elicit a comprehensive history and to carry out a complete physical examination. They learn to develop professional relationships with patients, and they acquire an understanding of the mechanisms of disease and of the principles necessary for valid diagnostic appraisal and effective therapeutic plans.

All courses of the first three years of the curriculum are required of all students. In the fourth year, with the guidance of faculty advisers, students design individual elective curricula, drawn from a wide range of basic scientific electives, clinical electives, and research programs offered by the faculty. Each fourth-year student is required to take a one-month elective in ambulatory care which includes clerkship experience in Public Health/Community Medicine. The elective courses of all departments are described in a catalog which is printed annually and distributed to students and faculty. Students are permitted to spend three months of the curriculum in elective programs offered by other medical schools. In addition, the School of Public Health offers international medicine programs that provide opportunities to study the organization and delivery of health services in many countries of the world.

During the elective curriculum students have available the resources of the entire University. Students are encouraged to utilize elective curriculum time to reach career decisions. Faculty advisers stress the acquisition of knowledge and skills in areas of medicine apart from the student's career discipline, and they encourage students to gain experience in clinical and/or laboratory research.

The College reserves the right to make changes in the program of studies and courses of instruction at any time.

Grades, Promotions, and Leaves of Absence

All courses are rated on an Honors-Pass-Fail system and these ratings only are recorded on the official transcripts. Students are not ranked within the class. Faculty provide narrative descriptions of student performances in preclinical courses (*Abnormal Human Biology, Introduction to the Patient,* and *Psychiatric Medicine I and II*), major clinical year clerkships, and elective programs. These evaluations become part of the student's permanent academic record in the Office of the Dean.

There are three standing faculty committees concerned with students' academic performances. These committees are: The First Year Class Faculty, the Second Year Class Faculty, and the Clinical Committee. The latter deals with academic performances in the major clinical year and the elective curriculum. The standing committees meet during each academic year to review student performances and to make decisions related to course failures and to promotions. Course failures in all years of the curriculum must be corrected according to the directives of the faculty committees. A student may be advanced to the next academic year of the medical school curriculum only upon recommendation of the faculty committee. In any year of the curriculum students may be dismissed for poor scholarship. Repetition of a year of the curriculum may be recommended by a faculty committee. The faculty committees may direct students whose performances are marginal to undertake additional work to correct deficiencies and strengthen overall performance in any discipline.

Students are informed in writing of the academic decisions of all faculty committees. Students have the right to appeal decisions of the faculty committees. A student who wishes to appeal

may request the concerned committee to reverse or alter a decision. If the committee reaffirms the original decision, the student may direct an appeal to the Dean of the Faculty of Medicine, who may refer the appeal to the Executive Committee of the Faculty Council for final decision.

The Faculty of Medicine reserves the right to dismiss, or to deny admission, registration, readmission, or graduation to any student who in the judgment of the Faculty of Medicine is to be unsuited for the study or practice of medicine.

Students in the College of Physicians and Surgeons are required to pass National Board Examinations Parts I and II prior to graduation.

Leaves of absence may be granted by the Dean for a limited period of time in exceptional circumstances only for health reasons or personal emergencies.

Key to Course Numbers

Medical Center courses: The suffixes F and S refer to first- and second-year courses, respectively. Numbers without a suffix indicate major clinical year clerkships that are repeated throughout the year in instruction periods of twelve weeks or less.

Basic Science and Introductory Clinic Courses of the First and Second Years

Abnormal Human Biology M6102
Dr. Canfield and interdepartmental associates: Cardiology, Dr. Drusin; Pulmonary, Dr. Enson; Endocrinology-Metabolism, Dr. Jacobs; Gastroenterology, Dr. Tall; Hematology, Dr. Bank; Immunology, Dr. Chess; Infectious Diseases, Dr. Neu; Oncology, Dr. Garret; Nephrology, Dr. Al-Awqati.
Exercises in the application and correlation of the basic sciences to a broad range of clinical problems. Teaching is by seminar/lecture and is closely integrated with courses in pathology, pharmacology, and introductory medicine.

Anatomy M5101. Microscopic anatomy
Dr. Nunez and departmental staff.
Lectures, conferences, and laboratory exercises including light and electron microscopic studies of structure in relation to function.

Anatomy M5102. Human anatomy
Drs. April, Moss, and departmental staff.
Lectures, conferences, and laboratory encompassing basic morphologial and functional human anatomy.

Anatomy M5103. Human development
Dr. Silverman and departmental staff.
Lectures, demonstrations, and laboratory emphasizing the fundamental processes of embryogenesis; closely integrated with *Anatomy 101F—Microscopic anatomy.*

Biochemistry M5101. Introductory biochemistry
Dr. Gold and departmental staff.
Lectures and conferences stressing principles of biochemistry and their relationship to disease processes.

Genetics M5101. Medical genetics
Dr. Schon and associates.
Lectures and clinical presentations emphasizing the practice of clinical genetics and the application of principles of genetics to the medical specialties.

Medicine M6104. Society and medicine
Dr. Rothman and associates.
Lectures and preceptor sessions to explore some of the legal, social, and ethical considerations that structure decision making in medicine.

Medicine M6105. Introduction to the patient
Dr. Charon and associates.
Clinical electives, lectures, and small group discussions introduce the student to the perspective of the patient, teach skills in medical interviewing, and examine the personal elements of the medical encounter.

Medicine M6106. Physical diagnosis
Dr. Siris and associates.
An intensive four-week clerkship (at Harlem, Overlook, Presbyterian, Roosevelt, or St. Luke's Hospital) during which the student learns to take a comprehensive medical history and perform a complete physical examination.

Microbiology M5101. General microbiology
Dr. Hamish Young and departmental staff.
Lectures, conferences, and laboratory covering the basic principles of cell regulation, immunology, virology, and the biology of pathogenic organisms.

Anatomy-Physiology M6106. Neural science
Drs. Kandel, Kelly, Kupfermann, Rowland, and Schwartz.
Lectures, seminars, laboratories, and clinical demonstrations to provide an integrated understanding of neurophysiology, neuroanatomy, biochemistry, and behavior.

Nutrition M5101. Introduction to nutrition
Dr. Goodman and associates.
Lectures that define the elements of nutrition essential for good health.

Pathology M6101. Pathology
Dr. Lefkowitch and departmental staff.
Lectures, conferences, and laboratories emphasizing the mechanisms of injury and repair in cells, tissues, and organ systems. Includes systemic pathology (light and electron microscope studies to elucidate the pathogenesis of findings in diseases) and neuropathology (studies of diseases of the nervous system). *Neuropathology M6106* may be taken as a separate course by graduate students only.

Pharmacology M6101. General and special pharmacology
Dr. Wit and departmental staff.
Lectures, seminars, and demonstrations to elucidate the basic principles essential for the effective use of drugs as therapeutic or diagnostic agents.

Medicine M5101. Physician-patient relationship
Dr. Park and associates.
Preceptor sessions emphasizing the central role of the physician-patient relationship in the practice of medicine and the importance of the effects of health care organization and other factors on that relationship.

Physiology M5101. Human physiology
Dr. Chase and departmental staff.
Lectures, demonstrations, and conferences to define the function of specific cells, tissues, and organs and their homeostatic mechanisms.

Psychiatry M5101. Psychiatric medicine, I
Dr. Cutler and departmental staff.
Lectures and seminars presenting the salient features of normal development.

Psychiatry M6102. Psychiatric medicine, II
Dr. Cutler and departmental staff.
Lectures and seminars covering the major mental illnesses and the elements of patient interviewing.

Public Health M5101. Structure of health care systems
Dr. Rosenberg and associates.
Lectures and seminar groups on the current organization of health care.

Public Health M5102. Epidemiology
Dr. Carmichael and associates.
Lectures and seminars to present epidemiological principles.

Public Health M5103. Biostatistics
Dr. Carmichael and associates.
Lectures on the basic elements of biostatistics applicable to medicine.

Public Health M6104. Parasitic diseases
Dr. Despommier and associates.
Lectures and laboratories stressing parasitic diseases likely to be encountered and the techniques necessary for the diagnosis of these diseases.

Major Clinical Year

Anesthesiology M7201. Clinical clerkship in anesthesiology
Dr. Curry and staff at the Presbyterian Hospital.
A clerkship that provides training in preanesthetic evaluation, management, and postanesthetic care of surgical patients. At the conclusion of the clerkship students should be able to do the following: (1) describe the major factors to be considered in selecting anesthetic drugs and techniques for patients undergoing common surgical procedures; (2) describe indications for positive pressure ventilation of the lungs and how the adequacy of such ventilation can be determined; (3) differentiate between a patent and obstructed airway in a patient and demonstrate on a patient or mannikin his/her ability to obtain a patent airway by positioning; (4) describe the indications for use of an endotracheal tube; (5) describe procedures used for resuscitation of a patient who has had cardiac arrest and demonstrate on a mannikin his/her ability to perform mouth-to-mouth ventilation and closed chest cardiac massage; (6) describe medications for and contraindications to the use of local anesthetics to provide infiltration and nerve block anesthesia; and (7) describe the causes, prevention, diagnosis, and treatment of local anesthetic drug toxicity.

Dermatology M7201. Clinical clerkship in dermatology
Dr. DeLeo and staff.

Medicine M7201. Clinical clerkship in medicine
Dr. Garvey and staff at the Harlem, Presbyterian, Roosevelt, and St. Luke's Hospitals.
Extended clinical experience under a preceptorship system at Presbyterian Hospital and at another affiliated hospital, Harlem, Roosevelt, or St. Luke's Hospital. At the conclusion of the clerkship the student should be capable of taking a precise medical history, performing an accurate physical examination, interpreting basic laboratory data, formulating a cogent problem list, and communicating these data in accurate verbal and written form. These skills will be acquired in the patient care setting in order to increase the student's understanding of the physiologic, psychologic, and social aspects of medicine and to prepare the student for the assumption of clinical responsibility under close supervision.

Neurology M7201. Clinical clerkship in neurology
Dr. Rowland and staff at the Neurological Institute of the Presbyterian Hospital
A comprehensive experience in clinical neurology provided at the bedside at the Neurological Institute. Under close supervision of a junior and senior resident and an attending physician in neurology, students learn to obtain a systematic neurological history and to perform and interpret the neurological examination. By active participation in the evaluation and care of patients, expertise is obtained in the diagnosis and treatment of common neurological diseases. Students learn how to do a lumbar puncture and they become familiar with electrodiagnostic and neuroradiological tests. Experience is also obtained in neurosurgery and rehabilitation medicine. Management of neurological emergencies is learned during night call with the senior resident. In addition, a comprehensive core knowledge of clinical neurology is ensured by a course syllabus, daily rounds, and preceptor sessions with the attending physician.

Neurology M7202. Neurosurgery
Dr. Stein and staff at the Neurological Institute of the Presbyterian Hospital.
Included in *Neurology M7201.*

Obstetrics and Gynecology M7201. Clinical clerkship in obstetrics and gynecology
Dr. Koulos and staff at the Harlem, Presbyterian, Roosevelt, and St. Luke's Hospitals.
A comprehensive clerkship in obstetrics and gynecology under close supervision of house staff and attendings. On the gynecological wards and in the clinics the student learns to take a sexual and gynecological history, to examine the breasts, abdomen, and pelvis, to distinguish normal and abnormal findings relative to gynecological disease, and to diagnose and manage benign and malignant gynecologic tumors. The student acquires the skills needed to approach problems of sexuality and an understanding of the impact of changing physiological states in menarche and menopause. One the obstetrical service the student learns the medical and surgical complications encountered during pregnancy and delivery, and the student learns to diagnose and manage pregnancy. The student participates in the conduct of labor, the delivery, and the care of the newborn.

Ophthalmology M7201. Clinical clerkship in ophthalmology
Dr. Donn and staff.

Orthopedic Surgery M7201. Clinical clerkship in orthopedic surgery
Dr. Dick and staff at the Presbyterian Hospital.
On the orthopedic surgery clerkship students learn to perform an orthopedic physical examination and to take an orthopedic history from a patient. The clerkship provides students with insight into the more common musculoskeletal problems (including fractures and trauma) and the basic approaches to management of these problems by an orthopedic surgeon. The student is expected to gain insight into how the discipline of orthopedic surgery works in conjunction with other specialties and how an orthopedic service provides in-patient and out-patient care.

Otolaryngology M7201. Clinical clerkship in otolaryngology
Dr. Abramson and staff at the Presbyterian Hospital.
A clerkship designed to teach the skills of physical examination of the ear, nose, and throat and to provide an understanding of certain diseases where this examination is crucial in diagnosis and management. The clerkship includes selected didactic lectures, followed by a preceptor-type experience in the clinic where students examine and work up a number of patients under the direct supervision of a faculty member.

Pediatrics M7201. Clinical clerkship in pediatrics
Drs. Katz, Pituch, and staff at the Babies Hospital (Presbyterian), Harlem, Roosevelt, and St. Luke's Hospitals.
A clinical clerkship providing both in-patient and ambulatory care experience. The student is introduced to the study of infants and children: growth and development, diseases, and health care maintenance. The student develops basic skills in the following areas: taking the pediatric history from the parents and from the older child; performing the physical examination of the pediatric patient, including the young infant; observing, analyzing, and recording the interaction between parent and child; and ordering and interpreting laboratory tests. The student learns to integrate the data acquired and formulate an appropriate problem list and plan for the patient. The student also learns to make the basic measurements of physical, neurological, and psychosocial growth and development, and to plot and assess the data.

Psychiatry M7201. Clinical clerkship in psychiatry
Dr. Marcus and staff at the New York State Psychiatric Institute, Harlem, Presbyterian, Roosevelt, and St. Luke's Hospitals.
A comprehensive clerkship in psychiatry. In active participation in patient care under faculty supervision the student is expected to learn to conduct a psychiatric history and mental status examination and to develop refined interviewing skills, noting verbal and nonverbal behavior. The student learns to make a psychiatric differential diagnosis, to use psychotropic drugs effectively, to evaluate suicide potential, and to develop and enhance therapeutic rapport. The clerkship aims to provide an appreciation of the effects of psychological, social, and biological phenomena on illness-related behaviors.

Radiology M7201. Diagnostic radiology (medical)
Dr. Baker and staff.

Radiology M7202. Diagnostic radiology (surgical)
Dr. Baker and staff.

Rehabilitation Medicine M7201. Clinical rehabilitation medicine
Dr. Downey and staff at the Neurological Institute of the Presbyterian Hospital.
Included in *Neurology M7201.*

Surgery M7201. Clinical clerkship in surgery
Dr. Reemtsma and staff at the Presbyterian Hospital.
A comprehensive clinical clerkship during which the student is expected to demonstrate improvement in ability to perform histories and physical examinations on surgical patients and to formulate rational diagnostic and therapeutic plans. The student is expected to demonstrate increasing skill and competence in performing selected procedures, in assuming supervised responsibility for patient care, in communicating succinctly and with clarity to patients and colleagues, and in building a functional body of critically examined information regarding common surgical entities.

Surgery M7202. Lectures and demonstrations in surgical pathology
Dr. Reemtsma and staff; Dr. Perzin and staff.
As part of the surgical clinical clerkship (*Surgery M7201*), these three one-and-a-half hour sessions per week describe various selected problems in surgical pathology. The didactic lectures are presented by the surgical "academic senior resident" (PGY5). This resident presents the clinical aspects of various surgical diseases and is assisted by a surgical pathology senior resident, who demonstrates gross specimens and microscopic slides appropriate to the topics and patients being discussed.

Urology M7201. Clinical clerkship in urology
Dr. Olsson and staff.
During the clinical clerkship in urology students learn to identify common disorders of the genito-urinary tract through precise patient interviews and examinations. Both ambulatory and in-patients are evaluated. By knowing diagnostic methods unique to urology, students are able to formulate appropriate diagnostic and therapeutic plans.

Fourth Year

Interdepartment 301. Ambulatory care/public health selective
Dr. C. Ortiz-Neu, course coordinator.
Each student in the fourth year is required to select an elective in ambulatory care, which includes clerkship experience in Public Health/Community Medicine. (For the rest of the Fourth Year see page 45 and the elective catalogue.)

Special Programs

M.D.—Ph.D. Program

This is a cooperative program sponsored by the Graduate School of Arts and Sciences and the College of Physicians and Surgeons for students who have had a strong undergraduate program in science and have a strong commitment to biomedical research. The program allows students to work toward the Ph.D. degree in one of the disciplines listed below in addition to earning the M.D. degree.

Students who participate in the program are admitted to the College of Physicians and Surgeons and to the Graduate School of Arts and Sciences.

Students complete the basic science requirements of the medical program and enter a participating department of the Graduate School to carry out the Ph.D. program. They then complete the balance of the requirements for the M.D. degree.

The participating Ph.D. programs are:

Anatomy and Cell Biology
Biochemistry and Molecular Biophysics
Biological Sciences
Chemistry
Epidemiology
Genetics and Development
Statistics
Microbiology
Nutrition
Pathology
Pharmacology
Physiology and Cellular Biophysics
Psychology

For additional information students should write to Dr. David Schacter, Chairman, Graduate Biomedical Sciences Advisory Committee, Department of Physiology and Cellular Biophysics, College of Physicians and Surgeons, 630 West 168th Street, New York, N.Y. 10032.

To apply, students should request an application from the College of Physicians and Surgeons. The application form provides instructions for students applying to the M.D.-Ph.D. program.

Joint M.D./M.P.H. Program

This dual degree program is under the joint direction of the College of Physicians and Surgeons and the School of Public Health. In addition to preclinical and clinical medical training, students gain substantive knowledge of the methods and content needed to protect and improve the health of populations and communities. Methods available include those of biostatistics, epidemiology, the social sciences and management. Students choose from content areas including problems of the environment, health care delivery, international health, geriatrics and gerontology, maternal and child health, disease prevention and health promotion or concentrate in methodology. Students are prepared for careers as traditional public health officers or a wide

variety of opportunities for research or practice in both the private and public sector of the economy. They develop concrete skills of research or administration applicable in interdisciplinary health service settings, both clinical and community based.

Before being considered for admission to the joint degree program, the applicant must first be accepted as a degree candidate in the College of Physicians and Surgeons. Formal application to the School of Public Health may then be made at any time before the student enters the fourth year of medical training. The overall length of the joint program, registration, and scheduling patterns differ for individual students. The total elapsed time could be as short as four years, but might extend beyond the four-year graduation date of the medical school. In general, during the first three years the joint degree student uses vacation and free time in the medical schedule to cross-register for public health courses. In the fourth year the student registers concurrently in the two schools, permitting opportunities to complete core, track, and elective public health courses and also carry the required clinical elective work in the medical curriculum. The M.D. and the M.P.H. degrees may be awarded simultaneously at the end of the fourth year; either degree may be awarded separately when the requirements have been met.

For further information, consult the Dean's Office in the College of Physicians and Surgeons, 630 West 168th Street, New York, N.Y. 10032, or the Dean's Office in the School of Public Health, 600 West 168th Street, New York, N.Y. 10032.

Integrated M.D.—Oral and Maxillofacial Surgery Program

This program is a cooperative effort of the College of Physicians and Surgeons, the School of Dental and Oral Surgery, and the Presbyterian Hospital. It has been designed to train specialists equipped to handle the expanded scope of maxillofacial surgical practice and to provide academic, research, and clinical leadership in this area. The program combines study for the M.D. degree at the College of Physicians and Surgeons with residency training in oral and maxillofacial surgery and general surgery at Presbyterian Hospital. Candidates must be accepted for admission to both the College of Physicians and Surgeons and the residency training program in oral and maxillofacial surgery. Interested candidates should request further information and an application form from Dr. Steven M. Roser, Division of Oral and Maxillofacial Surgery, School of Dental and Oral Surgery, 630 West 168th Street, New York, N.Y. 10032.

Programs in Physical Therapy and Occupational Therapy

Educational programs are offered by the Department of Rehabilitation Medicine to students who have already earned a bachelor's degree. They may apply for admission to a two-year program leading to the Master of Science degree in physical therapy or occupational therapy, or a second professional Master of Science degree in occupational therapy education or occupational therapy administration. Details are given in the bulletins of Physical Therapy and Occupational Therapy.

Program of the Center for Psychoanalytic Training and Research

A course of training in the theory and practice of psychoanalytic medicine is offered through the Center for Psychoanalytic Training and Research of the Department of Psychiatry. The program, a minimum of four years in length, leads to the award of a certificate in Psychoanalysis. For details, see the bulletin of the Center (formerly the Psychoanalytic Clinic).

Programs in Nutrition

The Master of Science program, administered by the Postgraduate Division of the Faculty of Medicine, is a twelve-month program that serves as a foundation for students who plan to continue for the Doctor of Philosophy degree or to attend a professional school in the health sciences. In addition, the master's program is offered to physicians and other health specialists who wish to augment their training with a knowledge of nutrition.

Requirements for admission: a bachelor's degree from an accredited college, with a strong emphasis on the sciences, including two years of chemistry, one year of biology, and a course in elementary biochemistry. The Graduate Record Examination is required.

Under the jurisdiction of the Executive Committee on Graduate Instruction of the Graduate School of Arts and Sciences, students may follow a program of studies leading to the Ph.D. degree. Course work and thesis research in nutritional biochemistry and in clinical and public health nutrition are carried out under the guidance of the Doctoral Program Subcommittee on Nutrition.

Requirements for admission: successful completion of the Master of Science degree program as outlined above, or the equivalent, and demonstrated scholarly ability in pursuing advanced studies and research. In addition, students must fulfill the general requirements for the degree which govern all Ph.D. candidates in the University.

Postdoctoral training in nutrition is offered for qualified individuals having the degree of Doctor of Medicine or the degree of Doctor of Philosophy who intend to pursue careers in teaching and research in nutrition. Clinics, selected nutrition courses, seminars, and participation in research projects are offered to qualified individuals. This program has considerable flexibility and is arranged with the individual to suit his or her particular goals and needs. Postdoctoral training is also available for qualified individuals holding either a doctorate in dentistry or a Ph.D. degree who plan to pursue a career teaching in dental schools and doing research related to nutrition and oral health.

Inquiries concerning the above programs may be directed to the Institute of Human Nutrition, 701 West 168th Street, New York, N.Y. 10032.

Program in Biophysics and Biophysical Chemistry

The program of study in biophysics and biophysical chemistry, which leads to the award of the degree of Doctor of Philosophy, is under the jurisdiction of the Graduate School of Arts and Sciences. Information about admission and degree requirements and courses of instruction is given in the bulletin of the Graduate School of Arts and Sciences.

Endowed Lectureships and Visiting Professorship

Through the kindness of generous donors, the resources of the Faculty of Medicine include several distinguished lectureships and a visiting professorship:

The *Cartwright Lecture Fund*, established under the will of Benjamin Cartwright, made possible biennial lectures under the sponsorship of the P&S Alumni Association during the period 1881–1912. A new series of Cartwright Lectures was inaugurated under the College's auspices in November 1974.

The *Alexander Ming Fisher Lectures* were established under the terms of the will of Dr. A.M. Fisher's half-brother, E. Douglas Southwick, to make possible lectures on the general theme of Death and Dying.

The *Michael Heidelberger Lectures* were begun in 1955 to honor the notable contributions of Dr. Heidelberger, now Professor Emeritus of Immunochemistry, and to stimulate further scientific progress in immunochemistry and related disciplines.

The *Ludwig Schaefer Visiting Professorship* was established by the bequest of the late Ludwig Schaefer to encourage and promote research work in the sciences of human physiology. It provides for the appointment of a visiting professor for six months, from parts of the world other than North and South America.

The *David Seegal Lectureship and Visiting Professorship Fund*, given by the Alpha Omega Alpha Honor Medical Society and others, provides for the appointment of a visiting professor who is in residence for five days. During this time he or she delivers the David Seegal Lecture on Chronic Disease.

Prizes and Awards

The *Distinguished Service Award* of the College of Physicians and Surgeons is given annually at Commencement exercises to a member of the faculty for outstanding contributions to medicine.

The *Louisa Gross Horwitz Prize*, the recipient of which traditionally gives a public lecture, was established under the will of the late S. Gross Horwitz in honor of his mother and is given annually in recognition of outstanding basic research in the fields of biology or biochemistry.

The *Charles W. Bohmfalk Memorial Prizes for Distinguished Contributions to Teaching in the Preclinical Sciences* and for *Teaching in the Clinical Sciences,* established in memory of a graduate of the class of 1883 and given to a member of the faculty for significant contributions to educational programs of the College.

The *Dr. Harold and Golden Lamport Research Awards* were initiated in 1983 to recognize outstanding young researchers in basic science and in clinical science.

The *Joseph Mather Smith Prize* is awarded to the graduate of the College whose original research in medical subjects is deemed by the Dean's Advisory Committee on Honors and Awards to be the most meritorious.

The *Stevens Triennial Prize* is awarded to the person, not necessarily a graduate of the College, whose original research on any medical subject is deemed by the Dean's Advisory Committee on Honors and Awards to be the most meritorious.

Postgraduate Programs

Opportunities for continuing medical education beyond the M.D. degree are offered at the College of Physicians and Surgeons through three major programs: (1) the training of specialists by means of hospital residencies; (2) special courses in general medicine and in the specialities, for practicing physicians and physicians in training who wish to renew and continue their educational experiences in the various fields of medicine; and (3) the Doctor of Medical Science Program, for physicians with particular interest and competence in research in the basic sciences. Further information about these programs may be obtained from the Office of the Dean of the Faculty of Medicine.

Graduate Training of Specialists

The program offers training opportunities through fellowships at the College of Physicians and Surgeons and residencies at affiliated hospital for holders, of the M.D. degree. Proper training for specialization includes four major elements. First, it provides a comprehensive clinical experience as a resident in the hospital that is equipped and staffed to provide graded responsibilities under the supervision of experts in the selected specialty. Second, it disciplines the resident in scientific attitudes toward health and disease and enriches the clinical experience through advanced training in those medical sciences that are largely concerned with the resident's specialty. Third, it enables the resident to see and to begin to understand the effect of illness on the individual patient and the response of that person to the illness and to the physician. The relationships that the resident physician develops with individual patients set the pattern for his or her participation in the delivery of health care after the completion of the residency. Finally, it gives the student the opportunity, either as a resident or as a fellow, to do basic or clinical research. This, in turn, may stimulate the type of creative productivity that may earn the student a recommendation for admission to a program leading to the award of the Doctor of Medical Science degree.

Postgraduate Courses for Practicing Physicians and Specialists

A variety of short courses have been organized at hospitals and clinics affiliated with the University; they are available at the Columbia-Presbyterian Medical Center and at the other affiliated hospitals. No University credit or certificates are granted for these courses, but continuing medical education credit is granted through the Physicians Recognition Award of the American Medical Association.

Courses for the general practitioner furnish opportunities to keep abreast of new knowledge and the latest methods of diagnosis, treatment, and prevention; and to learn the indications, limitations, and value of those technical procedures that require the attention of a qualified specialist. The instruction consists largely of first-hand clinical experience, lectures, demonstrations, and discussion.

For those already practicing a specialty, advanced instruction is given in the therapeutic and diagnostic methods of certain limited fields of practice. Enrollment is limited to those who have the preparation necessary to enable them to benefit by the advanced instruction.

Program for the Doctor of Medical Science Degree

The University confers the Med. Sc. D. degree upon a few physicians who have completed a research project in one of the basic science fields. Only staff members of the Columbia-Presbyterian Medical Center are eligible for this degree. A minimum of two years of full-time work in the basic science field is required. Additional requirements include completion of a significant and original research project, the passing of comprehensive and oral examinations, and submission of a dissertation.

Departments of Instruction

Listed are faculty appointments as of July 1, 1990.

The designation "also" indicates that the faculty member holds appointments in two departments. The designation "in" is used when an individual holds an appointment in the department where listed, with assignment to the department named after the "in."

Anatomy and Cell Biology

Professor and Chairman

Michael D. Gershon. *B.A., Cornell, 1958; M.D., 1963*

Professors

Anthony Bellve (in Urology and the Center for Reproductive Sciences). *B.Ag.Sci., Massey (New Zealand), 1964; M.Ag.Sci., 1967; Ph.D., North Carolina State, 1970*
Philip W. Brandt. *B.A. Swarthmore, 1952, M.S., Pennsylvania, 1957; Ph.D., Columbia, 1960*
Melvin L. Moss. *B.A., New York University, 1942; D.D.S., Columbia 1946; Ph.D., 1954*
Eladio A. Nunez. *B.S., St. John's (New York), 1951; M.S., 1953; Ph.D., New York University, 1964*
Ann-Judith Silverman. *B.A., California (Los Angeles), 1967; Ph.D., 1970*
Virginia Tennyson (also Pathology). *B.S., Pennsylvania State, 1946; M.S., Baylor, 1956; Ph.D., Columbia, 1960*
Dominique Toran-Allerand (in the Center for Reproductive Sciences). *B.A., Smith, 1955; M.D., Albany Medical College, 1959*

Professor of Clinical Neurochemistry

Hadassah Tamir (in Psychiatry). *M.S., Hebrew (Jerusalem), 1955; M.D., Israel Institute of Technology, 1959*

Adjunct Professors

Manfred Otto Nahmmacher. *Ph.D., Giessen (Germany), 1960*
Samuel Rosner. *M.D., Royal College of Physicians and Surgeons (Edinburgh), 1940; F.I.C.S., 1951*

Associate Professors

Richard T. Ambron. *B.S., Villanova, 1965; Ph.D., Temple, 1971*
Ernest W. April. *B.S., Tufts, 1961; Ph.D., Columbia, 1969*
Jeannette C. Bulinski. *B.A., Colorado, 1973; Ph.D., Wisconsin, 1980*
David R. Colman. *B.A., New York University, 1970; Ph.D., State University of New York (Downstate), 1977*
Christopher A. Gabel. *B.S., Iowa State, 1975; Ph.D., Washington (Seattle), 1979*
Richard H. Kessin. *B.A., Yale, 1966; Ph.D., Brandies, 1971*
Ronald K.H. Liem (also Pathology) (in the Center for Neurobiology & Behavior). *B.A., Amherst, 1967; M.S., Cornell, 1969; Ph.D., 1973*
Carol Mason (also Pathology) (in the Center for Neurobiology & Behavior). *B.S., Chatham, 1967; M.A., California (Berkeley), 1969; Ph.D., 1973*

Associate Professor of Clinical Neurobiology & Behavior

Samuel M. Schacher (in Psychiatry). *B.S., Columbia, 1971; M.A.,1974; Ph.D., 1976*

Research Scientist

Taube Pearl Rothman. *B.A., City College of New York, 1969; Ph.D., Cornell, 1975*

Assistant Professors

Gregg G. Gundersen. *B.S., Wisconsin, 1977; Ph.D., Washington, 1983*
Annette L. Kirchgessner. *B.A., Hunter, 1979; M.A., Queens, 1981; Ph.D., State University of New York (Brooklyn), 1985*
John E. Pintar (in the Center for Reproductive Sciences). *B.A., Case Western Reserve, 1970; Ph.D., Oregon, 1977*
Lorna Role (in the Center for Neurobiology & Behavior). *B.A., Harvard, 1975; Ph.D., 1981*
Ira A. Tabas (also Medicine). *B.S., Tufts, 1975; M.D., Washington, 1981*
Larry D. Witte (in Medicine). *B.S., Iowa State, 1970; Ph.D., 1974*

Assistant Professor of Clinical Psychiatry

Stephen G. Rayport (in the Center for Neurobiology & Behavior). *B.A., Harvard, 1975; Ph.D., Columbia, 1981; M.D., 1982*

Adjunct Assistant Professor

Craig H. Bailey (in Psychiatry and the Center for Neurobiology & Behavior). *B.A., Lehigh, 1967; M.S., 1969; Ph.D., 1973*

Associate Research Scientists

Elena Fiorica-Howells. *Ph.D., Milan (Paris), 1980*
Marthe J. Howard. *B.A., California, 1973; M.A., San Francisco State University, 1978; Ph.D., California, 1984*
James P. Kelly (also Otolaryngology). *B.A., Harpur, 1966; Ph.D., Washington (St. Louis), 1971*
Tuan Duc Pham, *B.S., St. Edward's (Texas), 1962; M.S., Loyola, 1967; M. Phil., Ph.D., Columbia, 1975*
Leslie E. Toth-Rogler. *B.A., Delaware, 1978; Ph.D., 1988*
Michael M. Van Lookeren. *B.S., Leiden, 1981, M.S., 1983; Ph.D., 1988*
Joan W. Witkin. M.A., Columbia, 1975; *Ph.D., 1981*

SPECIAL LECTURERS

Charles Noback, Ph.D.
Robin M. Rankow, M.D

Anesthesiology

E. M. Papper Professor and Chairman

Edward D. Miller, Jr. *B.A., Wesleyan, 1964; M.D., Rochester, 1968*

At Presbyterian Hospital

Professors

Henrik H. Bendixen. *M.D., Copenhagen, 1951*
Mieczyslaw Finster (also Obstetrics & Gynecology). *B.A., Gymnasium (Poland), 1941; M.D., Geneva, 1957*
Allen I. Hyman. *B.A., Columbia, 1955; M.D., Albany Medical College, 1959*
Hisayo Morishima (also in Obstetrics & Gynecology). *M.D., Toho (Tokyo), 1951; Ph.D., Tokyo 1960*

Gabriel G. Nahas. *M.D., Toulouse, (Nanking), 1944; Ph.D., Minnesota, 1953*
Eugene J. Pantuck. *B.S, Tufts, 1959; M.D., 1963*
Lubos Triner. *M.D., Charles (Prague), 1955; Ph.D., 1961*

Adjunct Professor

Sidney Spector (also Pharmacology). *B.S., Denver, 1948; M.S., 1950; Ph.D., Jefferson, 1956*

Adjunct Professor of Pharmacology

Allan H. Conney. *B.S., Wisconsin, 1952; M.S., 1954; Ph.D., 1956*

Professors of Clinical Anesthesiology

Leonard Brand. *B.S., Yale, 1946; M.D., Columbia, 1949*
Richard S. Matteo. *B.A., Syracuse, 1950; M.D., State Universityof New York (Upstate), 1955*
Hilda Pedersen. *M.B.,Ch.B., Edinburg, 1958*

Clinical Professor

Donald C. Brody. *B.A., Harvard, 1952; M.D., Boston, 1956*

Senior Research Scientist

Salha S. Daniel (also Pediatrics). *B.S., London, 1954; Ph.D., 1957*

Associate Professors

Arthur D. Finck. *B.S., Lafayette, 1969; M.D., Columbia, 1972*
Leila M. Pang. *B.A., Hawaii, 1966; M.D., State University of New York (Downstate), 1970*
Peter T. Rothstein (also Pediatrics). *B.A., Brandeis, 1966; M.D., Albert Einstein, 1970*
J. Gilbert Stone. *B.A., Dartmouth, 1960; M.D., State University of New York (Downstate), 1964*

Associate Professors of Clinical Anesthesiology

Ellise S. Delphin. *B.A., Barnard, 1971; M.D., Columbia, 1975*
Carolyn P. Greenberg. *B.A., Stanford, 1962; M.D., California (San Francisco), 1966*
Hoshang Jal Khambatta. *M.D., Karachi, 1958*
Eugene Ornstein. *M.S., Polytechnic Institute of Brooklyn, 1973; Ph.D., 1977; M.D., Miami (Florida), 1979*
Charles Weissman (also Medicine). *B.A., Yeshiva, 1972; M.D., State University of New York (Downstate), 1976*

Associate Professor of Clinical Bioengineering

Alvin Wald. *B.E.E., Cooper Union, 1955; M.E.E., Polytechnic Institute of Brooklyn, 1960; Ph.D., New York University, 1974*

Associate Clinical Professors

Keith J. Bernstein. *B.A., New York University, 1968; M.D., State University of New York (Downstate), 1974*
Pat J. Martin. *M.D., Columbia, 1974*
Richard K. Raker. *B.A., Michigan (Ann Arbor), 1969; M.D., 1973*
Jen-Tien Wung (in Pediatrics). *M.D., Tapei Medical College, 1966*

Research Scientists

Subhash Jamdar. *B.S., Government Science (Nagpur), 1960; Ph.D., Nagpur University, 1966*
Yvonne Vulliemoz (also Pharmacology). *M.S., Lausanne, 1958; Ph.D., Paris, 1969*

Assistant Professors

Joan F. Benca. *B.A., Bryn Mawr, 1976; M.D., Illinois, 1980*
Mitchell F. Berman. *B.A., Brown, 1977; M.D., Michigan 1981; M.P.H., Harvard, 1983*
Anthony R. Brown. *M.B.,Ch.B., Capetown (South Africa), 1972*
Saundra Curry. *B.A., Cornell, 1974; M.D., 1982*
Jeffrey Dornbusch. *B.A., California (Berkley), 1975; M.D., Yale, 1980*
Timothy J. Dowd. *B.A., Columbia, 1974; M.D., Cornell, 1982*
Ingrid Anne-Marie Fitz-James. *B.A., Sarah Lawrence, 1973; M.D., Columbia, 1977*
Douglas T. Jackson. J.D., New York University, 1974; *M.D., Temple, 1983*
Desmond A. Jordan. *B.S., Cornell, 1974; M.D., Brown, 1979*
Matthew T. Levine. *B.A., State University of New York (Buffalo), 1980; M.D., Tel Aviv (Israel), 1984*
Michael Luvin. *B.S.,M.D., Union, 1983*
Laurence P. Mark. *B.S., Harvey Mudd, 1975; M.D., Columbia, 1979*
Donald M. Mathews. *B.A., Harvard, 1980; M.D., Columbia, 1984*
Samantha Mullis. *B.S, Michigan State,* 1975; *M.D., 1979*
Peter L. Salgo (also medicine). *B.A., Columbia, 1971; M.D., 1975*
William Schechter. *B.A., Columbia, 1976; M.S., New York University, 1978; M.D., State University of New York (Buffalo), 1982*
Arthur E. Schwartz. *B.S., Rensselaer Polytechnic Institute, 1978; M.D., State University of New York (Downstate), 1982*
Steven M. Shulman. *B.A., Massachusetts, 1978; M.D., 1984*
Arthur J. Smerling. *B.A., Yeshiva, 1976; M.D., Pittsburgh, 1980*
Richard M. Smiley. *B.S., Massachusetts Institute of Technology, 1977; M.A., Columbia, 1978; Ph.D., 1981; M.D.,Miami, 1983*
Lena S. Y. Sun. *B.S., Massachusetts Institute of Technology, 1975; M.D., Mt. Sinai, 1979*
William L. Young. *B.A., Indiana, 1976; M.D., College of Medicine and Dentistry of New Jersey, 1979*

Assistant Professors of Clinical Anesthesiology

Dorothy A. Black. *B.A., Rutgers, 1957; M.A., Columbia, 1959; M.D., Harvard, 1965*
Kathryn A.W. Cozine. *M.D., Johns Hopkins, 1961*
Albert Faltas. *M.D., Kasr-El-Ainy Medical School (Egypt), 1961*
Gerald S. Weinberger. *M.D., New York University, 1948*

Assistant Professor of Clinical Psychology

Robert Dworkin (in Anesthesiology and Psychiatry). *B.A., Pennsylvania, 1971; Ph.D., Harvard, 1977*

SPECIAL LECTURER

Vance R. Lauderdale, Jr., M.D.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Andrew L. Rauscher. *M.B., London, 1963; M.B.,B.S., 1966*

Assistant Clinical Professors

Erik Edgren. *B.A., Uppsala, 1970; M.D., 1974; Ph.D., 1987*
Cindy W. Hughes. *B.S., State University of New York (Buffalo), 1977; M.D., 1983*
Edward Palmer. *B.A., Dartmouth, 1967; M.D. Cornell, 1971*

At Harlem Hospital Center

Assistant Professor

Gilbert Phanor. *B.S., Lycee T. Gilboro, 1953; M.D., Medical School of Haiti, 1960.*

Assistant Professors of Clinical Anesthesiology

Yvetot Antoine. *M.D., State University of Haiti, 1962*
Archibald K. Hinds. *B.A., College of the City of New York, 1952; M.D., Montpellier, 1962*
Jung Kie Park. *B.S., Soyang (Seoul), 1972; M.D., Han Yang (Seoul), 1977*
J. Sinclair Trimiar. *B.S., Howard, 1960; D.D.S., 1964*

Assistant Clinical Professors

Gerald Augustin. *B.A.,Fordham, 1980; M.D., State University of New York (Brooklyn), 1984*
Clarissa P. Carino. *B.S., Far Eastern (Manila), 1966; M.D., 1968*
Young In Choi. *M.D., Ewha Woman's University (Seoul), 1975*
Jacques Dole. *M.D., Medical School of Port-au-Prince (Haiti), 1972*
Michele J. Lewis. *B.S., Tufts, 1981; M.D., State University of New York (Downstate), 1985*
Eliseo S. Ozomek. *M.D., Buenos Aires (Argentina), 1962*

SPECIAL LECTURER

Samuel C. Brisbane, M.D.

At Overlook Hospital

Assistant Clinical Professors

John Rocco Calabro. *B.S., Manhattan, 1971; M.D., College of Medicine and Dentistry of New Jersey, 1975*
Henry A. Connolly, Jr. *B.S., Fordham, 1951; M.D., Hamburg, 1955*
Demetrios B. Kalas. *M.D., Aristotelian, 1954*

INSTRUCTORS IN CLINICAL ANESTHESIOLOGY

Sami A.M. Abadir, M.D.
Jane De V. Stark, M.D.
Carol Zimmerman, M.D.

At St. Luke's-Roosevelt Hospital Center

Assistant Professors of Clinical Anesthesiology

David J. Birnbach. *M.D., Royal College of Surgeons, 1984*
Enzio Gallozzi. *M.D., Rome, 1953*
Joseph Iacovelli. *B.A., Buffalo, 1952; M.D., Bologna, 1958*

ASSOCIATES IN CLINICAL ANESTHESIOLOGY

Guglielmina Bettinti, M.D.
Hilda H.C. Liu, M.D.
Altagracia H. Polanco, M.D.

INSTRUCTORS IN CLINICAL ANESTHESIOLOGY

Gary S. Feldstein, M.D.
Julio M. Garcia Rodriguez, M.D.
Dilber Hussein, M.D.
Zdan J. Korduba, M.D.
Han Chiang Lee, M.D.
Ignacia U. Ngo, M.D.
Kyaw Nyunt, M.B., B.S.
Nirmal V. Patel, M.D.
Michael Bruce Putter, M.D.
Kenneth A. Rothenberg, M.D.
Kristappa Sangavaram, M.D

Biochemistry and Molecular Biophysics

Professor and Chairman

David I. Hirsh. *B.A., Reed, 1961; Ph.D., Rockefeller, 1968*

Professors

Frederick W. Alt (also Microbiology). *B.S., Brandeis, 1971; Ph.D., Stanford, 1978*
Richard Axel (Eugene Higgins Professor) (also Pathology) (in the Institute of Cancer Research). *B.A., Columbia, 1967; M.D., Johns Hopkins, 1970*
Ruth E. Benesch. *B.Sc., London, 1946; Ph.D., Northwestern,* 1951
Kathryn L. Calame. (also Microbiology). *B.S., Missouri, 1962; M.S., George Washington, 1965; Ph.D., 1975*
Isidore S. Edelman (Robert Wood Johnson, Jr., Professor). *M.D., Indiana, 1944*
Philip Feigelson. *B.S., Queens, 1947; Ph.D., Wisconsin, 1951*
Stephen Goff (also Microbiology). *B.A., Amherst, 1973; Ph.D., Stanford, 1978*
Robert F. Goldberger. *M.D., New York University, 1958*
Maxwell Gottesman (Charles H. Revson Professor) (also Microbiology) (in the Institute of Cancer Research). *M.D., Yale, 1960; Ph.D., 1965*
Dezider Grunberger (also Public Health) (Environmental Health Science) (in the Institute of Cancer Center). *M.Sc., Technical (Czechoslovakia), 1950; Ph.D., Czechoslovakia Academy of Sciences, 1956; Sc.D., 1968*
Wayne Hendrickson. *B.A., Wisconsin, 1963; Ph.D., Johns Hopkins, 1968*
Barry Honig. *B.Sc., Polytechnic Institute of Brooklyn, 1963; M.A., Johns Hopkins, 1964; Ph.D., Weizmann Institute (Israel), 1968*
Thomas Jessell (in the Center for Neurobiology & Behavior). B. Pharm., London, 1973; *Ph.D., Cambridge, 1974*
Arthur Karlin (Eugene Higgins Professor) (also Neurology). *B.A., Swarthmore, 1957; Ph.D., Rockefeller, 1962*
Alvin I. Krasna. *B.A., Yeshiva, 1950; Ph.D., Columbia, 1955*
Dinshaw Patel. *Ph.D., New York University, 1966*
Parithchery Srinivasan. *B.Sc., Madras, 1946; Ph.D., 1953*

Adjunct Professor

Benno P. Schoenborn. *B.A., California (Los Angeles), 1958; Ph.D., New South Wales, 1962*

Associate Professors

Kurt Drickamer. *B.S., Stanford, 1973; Ph.D., Harvard, 1978*
Allen M. Gold. *B.A., Chicago, 1950; Ph.D., Harvard, 1955*

Adjunct Associate Professor

John D. Karkas. *Ph.D., Columbia, 1962*

Research Scientists

Philip E. Bourne. *B.S., Flinders (Australia), 1974*
Stuart G. Fischer. *B.S., Chicago, 1965; M.Ed., Columbia, 1967; Ph.D., Princeton, 1977*
Eftihia Tzilianos. *Ph.D., Witwatersrand (South Africa), 1972*

Assistant Professors

Aneel K. Aggarwal. *B.S., Kings College (London), 1981; Ph.D., 1984*
Richard K. Assoian (in the Center for Reproductive Sciences). *Ph.D., Chicago, 1981*
Robert S. Cohen (in Urology and the Center for Reproductive Sciences). *B.S., Delaware, 1978; Ph.D., Southern California, 1982*
Mitchell Goldfarb. *Ph.D., Massachusetts Institute of Technology, 1979*
Richard S. Mann (in the Center for Reproductive Sciences). *B.S. Cornell, 1980; Ph.D., Massachusetts Institute of Technology, 1986*

Associate Research Scientists

Francis K. Athappilly. *B.S., Calicut (India), 1977; M.S., 1979*
Henry A. Choy. *B.A., California, 1971; M.S., Michigan, 1974; Ph.D., 1980*
Carlos De Los Santos. *Ph.D., Facultad of Farmacia & Bioquimica, 1987*
Richard A. Friedman. *B.A., New York University, 1971; M.S., 1974; Ph.D., 1977*
David J. Glass. *B.A., Columbia, 1981; M.D., New York Medical College, 1985*
Sahebarao Mahadik (also Psychiatry). *Ph.D., Poona (India), 1969*
Veeramac K. Prasad. *Ph.D., City University of New York, 1979*
James J. Russo. *B.S., St. John's (New York), 1974; M.S., New York University, 1977; Ph.D., 1981*
Kim Andrew Sharp. *Ph.D., British Columbia, 1985*

SPECIAL LECTURERS

Erwin Chargaff, Ph.D.
Max A. Eisenberg, Ph.D.
Seymour Lieberman, Ph.D.
Barbara Low, D. Phil.
David B. Sprinson, Ph.D.
Maurice M. Rapport, Ph.D.

At Mary Imogene Bassett Hospital

Adjunct Associate Professor

Theodore Peters, Jr. *B.S., Lehigh, 1943; Ph.D., Harvard, 1950*

Dermatology

Clinical Professor and Acting Chairman

Robert R. Walther. *B.A., Cornell, 1969; M.D., North Carolina,1973*

At Presbyterian Hospital

Professor

Leonard C. Harber (Richard & Mildred Rhodebeck Professor) (also Public Health). *B.A., Johns Hopkins, 1949; M.D., New York University, 1953*

Professor of Clinical Dermatology

Richard Scher. *B.A., New York University, 1949; M.A., Brooklyn, 1951; M.S., New York University, 1960; M.D., Howard, 1955; M.A., Brown, 1984*

Clinical Professors

Marc E. Grossman. *B.A., State University of New York (Buffalo),1970; M.D., Pennsylvania, 1975*
Saul L. Sanders. *B.A., Kenyon, 1950; M.D., Cornell, 1952*

Associate Clinical Professors

Jack Eisert. *B.A., Cornell, 1952; M.D., State University of New York (Downstate), 1956*
David N. Silvers (also Pathology). *B.A., Haverford, 1964; M.D., Duke, 1968*
Richard L. Walzer. *B.A., Harvard, 1952; M.D., Columbia, 1956*

Assistant Professors

Carola Louise Berger (also Pathology). *B.S., College of the City of New York, 1966; M.A., Columbia, 1971; M.S., 1975; Ed.D., 1976; Ph.D., 1984*
Vincent De Leo (Irving Assistant Professor). *B.S., Louisiana State, 1965; M.D., 1969*
Janet H. Prystowsky (Irving Assistant Professor). *B.S., Pennsylvania State, 1974; M.S., Columbia, 1975; Ph.D., 1979; M.D., Chicago, 1983*

Assistant Clinical Professors

Irving Abrahams. *B.A., New York University, 1948; M.D., State University of New York (Downstate), 1954*
Alan D. Andrews. *B.S., Illinois, 1968; M.D., Virginia, 1972*
Robert B. Armstrong. *B.A., Haverford, 1969; M.D., Columbia, 1973*
William G. Atwood. *A.B., Harvard, 1954; M.D., Columbia, 1958*
Vincent S. Beltrani. *B.A., Brooklyn, 1953; M.D., Columbia, 1957*
Leon K. Demar. *M.D., New York University, 1973*
Yehuda D. Eliezri. *B.A., Brooklyn, 1966; M.S., Yeshiva, 1971; M.D., Western Ontario, 1976*
Robert B. Feinstein. *M.D., New York University, 1967*
David Goldminz. *B.S., Stanford, 1978; M.D., Boston, 1983*
Anthony N. Gregory. *B.A., Davidson, 1974; M.P.H., Chapel Hill, 1977; M.D., 1984*
Eric W. Herman. *B.A., State University of New York (Buffalo), 1972; M.D., Mt. Sinai, 1976*
Cheryl S. Hutt. *B.A., Barnard, 1974; M.D., Columbia, 1978*
Einar A. Juhlin. *B.S., Illinois, 1950; M.D., Royal Charles (Sweden), 1957*
Bruce Elliot Katz. *B.S., McGill, 1973; M.D., 1977*
Jeffrey S. Kezis. *M.D., Hahnemann, 1970*
Elizabeth H. Knobler. *B.A., Skidmore, 1972; M.P.H., Columbia, 1974; M.D., State University of New York (Stonybrook), 1984*
Theodore A. Labow. *M.D., Tufts, 1955*
Asher D. Rabinowitz. *B.A., Yeshiva, 1970; M.D., George Washington, 1974*
Jack H. Rozen. *B.S., Pittsburgh, 1958; M.D., 1962*
Paul Ira Schneiderman. *B.S., Wisconsin, 1967; M.D., State University of New York (Syracuse), 1971*
Robert S. Seibt. *B.A., St. Olap, 1971; M.D., Minnesota, 1978*
Eugene W. Sweeney. *B.S., Manhattan, 1956; M.D., New York Medical College, 1960*

SPECIAL LECTURER

Margarita Hutner, M.D.

LECTURERS

Richard L. Edelson, M.D.
Francisco Kerdel-Vegas, M.D.
Robert Knobler, M.D.
Steven R. Kohn, M.D.

ASSOCIATES IN CLINICAL DERMATOLOGY

Rhonda Koenig Berkowitz, M.D.
Robert Michael Bernstein, M.D.
Timothy J. Corey, M.D.
William J. Cunningham, M.D.
Charles L. Halasz, M.D.
Howard Horlick, M.D.
Ruth Kaplan-Treiber, M.D.
Elizabeth Konecky, M.D.
Joseph Penner, M.D.
Margaret S. Ravits, M.D.
Daniel M. Rosenthal, M.D.
Kass Sadri, M.D.

ASSOCIATES *(continued)*

Luis S. Suarez, M.D.
Jo-Ann Szylit, M.D.
Arnold Charles Toback, M.D.
Harvey I. Weinberg, M.D.
Deborah A. Wiener, M.D.

INSTRUCTORS IN CLINICAL DERMATOLOGY

Laila M. Almeida, M.D.
Johanna Baeuerle, M.D.
David E. Bank, M.D.
Vincent P. Beltrani, M.D.
Alice E. Cardullo, M.D.
Annette A. Cohen, M.D.
Danielle E. Engler, M.D.
Martha J. Maso, M.D.
Amy Elaine Newburger, M.D.
Jeffrey Alan Sklar, M.D.
George E. Thorne, M.D.
Steven Wolinsky, M.D.
Michael J. Yunakov, M.D.

At Morristown Memorial Hospital

Assistant Clinical Professor

Emil Bisaccia (also Medicine). *B.A., Ohio State, 1974; M.D., Medical College of Ohio, 1979*

At St. Luke's-Roosevelt Hospital Center

Clinical Professor

Alexander W. Young, Jr. *B.S., Maryland, 1944; M.D., 1946*

Assistant Clinical Professors

William P. DiPietro. *B.S., Massachusetts Institute of Technology, 1972; M.D., Georgetown, 1976*
Herbert H. Hochman. *B.A., Columbia, 1966; M.D., Tulane, 1970*
Peter C. Lombardo. *B.S., Rochester, 1955; M.D., Albany, 1959*
David Sibulkin. *B.A., New York University, 1962; M.D., 1966*
Gregory Zalar. *B.S., George Washington, 1965; M.D., 1969*

ASSOCIATE IN CLINICAL DERMATOLOGY

Stanley J. Lewis, M.D.

Genetics and Development

Professor and Acting Chairman

Argiris Efstratiadis. *Dr. Med. Sci., Athens (Greece), 1971; M.D., 1966; Ph.D., Harvard, 1976*

Professors

Arthur Bank (also Medicine). *B.A., Columbia, 1956; M.D., 1960*
Marian B. Carlson (in the Institute of Cancer Research). *B.A., Radcliffe, 1973; Ph.D., Stanford, 1978*

Georgiana Jagiello (also Virgil G. Damon Professor of Obstetrics & Gynecology) (in the Center for Reproductive Sciences). *B.A., Boston, 1949; M.D. Tufts, 1955*
I. Bernard Weinstein (also Frode Jensen Professor of Medicine) (also Public Health) (in the Comprehensive Cancer Center). *B.S., Wisconsin, 1951; M.D., 1955*

Adjunct Professor

Michael H. Wigler. *B.A., Princeton, 1970; M.S., Rutgers, 1972; Ph.D., Columbia, 1978*

Professors of Clinical Genetics

Jurg Ott (in Psychiatry). *Ph.D., Zurich, 1967; M.S., Washington, 1972*
Dorothy Warburton (in Pediatrics). *B.S., McGill. 1957; Ph.D., 1961*

Professors of Clinical Psychiatry

L. Erlenmyer-Kimling. *B.S., Columbia, 1957; Ph.D., 1960*
John D. Rainer. *B.A., Columbia, 1941; M.A., 1944; M.D., 1951*

Associate Professors

Franklin D. Costantini. *B.S., Yale, 1974; Ph.D., California Institute of Technology, 1980*
Rodney J. Rothstein. *B.S., Illinois, 1969; Ph.D., Chicago, 1975*
Leonardus Van der Ploeg. *B.S., Amsterdam, 1980; Ph.D., 1984*
Debra Wolgemuth (in the Center for Reproductive Sciences). *B.A., Gettysburg, 1969; M.A., Vanderbilt, 1971; M. Phil., Columbia, 1975; Ph.D., 1977*

Assistant Professors

Maggi Allan (in Medicine). *B.A., Stirling (Scotland), 1975; Ph.D., Glasgow, 1979*
Elizabeth Robertson. *B.A., Oxford, 1978; M.A., 1982; Ph.D., Cambridge, 1982*
Eric A. Schon (in Neurology). *B.S., Columbia, 1968; M.S., Cincinnati, 1973; Ph.D., 1982*
Gary Struhl. (in the Center for Neurobiology & Behavior). *B.S., Massachusetts Institute of Technology, 1976; M.S., 1976; Ph.D., Cambridge, 1980*

Adjunct Assistant Professors

Jurgen Brosius (in the Center for Neurobiology & Behavior). *B.A., Johann Wolfgang Goethe (Frankfort), 1974; Ph.D., Max Planck Institute, 1976*
Andrew P. McMahon. *Ph.D., London, 1981*

Associate Research Scientist

Harlow K. Fischman. *B.A., Brooklyn, 1955; M.S., Arkansas, 1960; Ph.D., New York University, 1968*

LECTURER

Jerard Hurwitz, Ph.D.

Medicine

Professor and Acting Chairman

John Lindenbaum. *B.A., Cornell, 1954; M.D., Harvard, 1959*

At Presbyterian Hospital

Professors

Qais Al-Awqati (Robert F. Loeb Professor) (also Physiology & Cellular Biophysics). *M.B.,Ch.B., Baghdad, 1962*
Arthur Bank (also Genetics & Development). *A.B., Columbia, 1956; M.D., Harvard, 1960*
J. Thomas Bigger (also Pharmacology) *B.A., Emory, 1955; M.D., Georgia, 1960*
John P. Bilezikian (also Pharmacology). *A.B., Harvard, 1965; M.D., Columbia, 1969*
Vincent P. Butler, Jr. *A.B., St. Peter's, 1949; M.D., Columbia, 1954*
Peter R.B. Caldwell. *A.B., Dartmouth, 1954; M.D., Harvard, 1958*
Robert E. Canfield (Herbert and Irving Professor) (in the Irving Center for Clinical Research). *B.S., Lehigh, 1952; M.D., Rochester, 1957*
Paul J. Cannon. *B.A., Holy Cross., 1954; M.D., Harvard, 1958*
Leonard Chess. *B.S., Massachusetts Institute of Technology, 1964; M.D., State University of New York (Downstate), 1968*
Michael Field *(also Physiology & Cellular Biophysics). B.A., Chicago, 1953, M.D., Boston, 1959*
Andrew G. Frantz. *A.B., Harvard, 1951; M.D., Columbia, 1955*
DeWitt S. Goodman (Tilden-Weger-Bieler Professor of Preventative Medicine) (in the Institute of Human Nutrition). *A.B., Harvard, 1951; M.D., 1955*
John N. Loeb. *A.B., Harvard, 1957; M.D., 1961*
Harold C. Neu. (also Pharmacology). *B.A., Creighton, 1956; M.D., Johns Hopkins, 1960*
Benvenuto Pernis (also Microbiology). *M.D., Milan, 1947*
Alan R. Tall. *M.B.,B.S., Sydney (Australia), 1970*
Donald F. Tapley (Alumni Professor). *B.S., Acadia, 1948; M.D., Chicago, 1952*
Gerald E. Thomson (Samuel W. Lambert Professor). *B.S., Queens, 1955; M.D., Howard, 1959*
I. Bernard Weinstein (Frode Jensen Professor) (also Public Health and Genetics & Development) (in the Comprehensive Cancer Center). *B.S., Wisconsin 1951; M.D., 1955*

Professor of Medical Informatics

Paul Clayton (also Radiology). *B.A., Utah, 1966; M.S., Arizona, 1969; Ph.D., 1973*

Professor of Social Medicine

David J. Rothman (Bernard Schoenberg Professor) (in the Center for the Study of Society and Medicine). *B.A., Columbia, 1958; M.A., Harvard, 1959; Ph.D., 1964*

Adjunct Professor

Robert I. Levy. *B.A., Cornell, 1957; M.D., Yale, 1961*

Professors of Clinical Medicine

Gerald B. Appel. *B.A., Cornell, 1968; M.D., Albert Einstein, 1972*
Elsa-Grace V. Giardina. *B.A., Bryn Mawr, 1961; M.D., New York Medical College, 1965*
Donald A. Holub. *B.A., Columbia, 1949; M.D., 1952*
Israeli A. Jaffe. *B.S., New York University, 1947; M.D., Columbia, 1950*
Edgar Leifer. *B.S., College of the City of New York, 1937; M.A., Columbia, 1939; Ph.D., 1941; M.D., 1946*
Thomas Q. Morris. *B.S., Notre Dame, 1954; M.D., Columbia, 1958*
Jane H. Morse. *B.A., Smith, 1951; M.D., Columbia, 1955*
James A. Reiffel. *B.A., Duke, 1965; M.D., Columbia, 1969*
Joseph G. Sweeting. *B.S., Holy Cross, 1951; M.D., Columbia, 1956*
Robert N. Taub. *B.A., Yeshiva, 1957; M.D., Yale, 1961; Ph.D., London, 1969*
Robert T. Whitlock. *B.A., North Carolina, 1950; M.D., 1957*

Adjunct Professor Clinical Medicine

Robert H. Palmer. *B.A., Oberlin, 1953; M.D., Harvard, 1957*

Clinical Professors

Ralph S. Blume. *B.A., Amherst, 1960; M.D., Columbia, 1964*
John R. Edsall. *B.A., Cambridge, 1945; M.B.,Ch.B., 1948*
Abbie I. Knowlton. *B.A., Bryn Mawr, 1983; M.D., Columbia, 1942*
William P. Lovejoy. *B.A., Yale, 1956; M.D., Columbia, 1962*
David J. McConnell. *M.D., Yale, 1962*
Jay I. Meltzer. *B.A., Princeton, 1949; M.D., Columbia, 1953*
Richard J. Stock. *B.S., Yale, 1944; M.D., Columbia, 1947*
John A. Wood. *A.B., Harvard, 1943; M.D., 1946*

Senior Research Scientists

Steven Birken. *Ph.D., St. John's (New York), 1972*
Maynard E. Pullman. *B.S., Illinois, 1948; Ph.D., Johns Hopkins, 1953*

Associate Professors

Leslie Baer. *B.A., Wisconsin, 1959; M.D., Columbia, 1963*
Henry N. Ginsberg. *B.A., Brooklyn, 1960; M.D., State University of New York (Downstate), 1970*
Ira Jay Goldberg. *B.S., Massachusetts Institute of Technology, 1971; M.D., Harvard, 1975*
Faramarz Ismail-Beigi. *B.A., Berea, 1962; M.D., Johns Hopkins, 1966; Ph.D., California (San Francisco), 1971*
Sharon L. Wardlaw. *B.S., Cornell, 1970; M.D., 1975*

Associate Professor of Occupational Medicine

Paul W. Brandt-Rauf (in Public Health) (Environmental Health Sciences). *B.S., Columbia, 1970; M.S., 1973; Sc.D., 1974; M.D., 1979; M.P.H., 1980*

Associate Professors of Clinical Medicine

Conrad B. Blum. *B.S., Northwestern 1969; M.D., 1971*
Herbert S. Chase, Jr. *B.A., Brown, 1970; M.D., Mt Sinai, 1974*
Randolph P. Cole. *B. Ch. E., Manhattan, 1968; M.D., State University of New York (Downstate), 1973*
James Coromilas. *B.S., Columbia, 1969; M.D., McGill, 1975*
Jay Franklin Dobkin. *B.A., Columbia, 1968; B.M.S., Dartmouth, 1970; M.D., Harvard, 1972*
Ronald E. Drusin. *B.S., Union (Schenectady), 1962; M.D., Columbia, 1966*
Yale Enson. *B.A. Columbia, 1948; M.D., State University of New York (Downstate), 1953*
Dorothy Estes. *B.C., Wheaton (Massachusetts), 1946; M.D., Columbia, 1950*
Glenda J. Garvey. *B.A., Wellesley, 1964; M.D., Columbia, 1969*
Peter H. R. Green. *M.B.,B.S., Sydney, 1970; M.D., 1979*
Robert H. Heissenbuttel. *B.A., Thiel, 1959; M.D., Columbia, 1963*
Wylie C. Hembree, III (also Obstetrics & Gynecology). *B.A., Vanderbilt, 1960; M.D., Washington (St. Louis), 1964*
Thomas P. Jacobs. *B.A., Amherst, 1964; M.D., Johns Hopkins, 1968*
Kung-Ming Jan. *M.B. National Taiwan, 1967; Ph.D., Columbia, 1971*
Lynne L. Johnson. *B.A., Wellesley, 1965; M.D., Columbia, 1969*
George W. Melcher, Jr. *B.A., Colorado, 1943; M.D., Columbia, 1946*
Juan A. Oliver. *Bachiller, Institute Menendez (Spain), 1961; M.D., Barcelona, 1967*
Martin W. Oster. *B.A., Columbia, 1967; M.D., Columbia, 1971*
Brian Scully. *B.A., Trinity (Dublin), 1969; M.B., 1971*

Ethel S. Siris. *B.A., Radcliffe, 1967; M.D., Columbia, 1971*
Frank R. Smith. *A.B., Dartmouth, 1959; M.D., Columbia, 1962*
Charles Weissman (also Anesthesiology). *B.A., Yeshiva, 1972; M.D., State University of New York (Downstate), 1976*
Francis M. Weld. *A B., Harvard, 1961; M.D., Columbia, 1965*

Associate Professor of Clinical Psychiatry

Jerry Finkel. *B.A., Columbia, 1957; M.D., 1961*

Associate Clinical Professors

David K. Blood. *B.A., Amherst, 1962; M.D., Columbia, 1966*
John O. Burris. *B.S., Wyoming, 1952; M.D., Rochester, 1956*
Michael H. Cohen. *B.A., Johns Hopkins, 1961; M.D., 1965*
Oliver T. Fein (also Public Health). *B.A., Swarthmore, 1962; M.D., Case Western Reserve, 1967*
Kenneth C. Fine. *M.D., Catholic (Louvain, Belgium), 1970*
Lionel Grossbard. *B.A., Columbia, 1957; M.D., 1961*
George A. Hyman. *B.A., Columbia, 1942; M.D., 1945*
Robert L. Jones. *B.S., Tulane (New Orleans), 1966; M.D., 1970*
Rafael A. Lantigua. *M.D., Autonomous (Santo Domingo), 1972*
Oscar Lebwohl. *A.B., Dartmouth, 1968; M.D., Harvard, 1972*
Robert M. Lewy (also Public Health). *B.A., Rochester, 1967; M.D., College of Medicine and Dentistry of New Jersey, 1971*
Frank S. Livelli. *B.A., Columbia, 1972; M.D., Harvard, 1976*
Arthur M. Magun. *B.A., Haverford, 1972; M.D., Mt. Sinai, 1977*
Aaron N. Manson. *B.A., Pennsylvania, 1972; M.D., 1976*
Eric R. Marcus (also Psychiatry). *B.A., Columbia, 1965; M.D., Wisconsin, 1969*
George H. McCormack, Jr. *B.S., Holy Cross, 1945; M.D., Columbia 1949*
Hans W. Neuberg. *B.A., Wagner, 1941; M.D., Columbia, 1950*
Carmen I. Ortiz-Neu. *B.A., Wellesley, 1959; M.D., Columbia, 1963*
Constance M. Park. *B.A., Radcliffe, 1964; M.S., Harvard, 1967; M.D., Albert Einstein, 1974*
Michael F. Parry. *B.A., Yale, 1966; M.D., Columbia, 1970*
Kenneth M. Prager. *B.A., Columbia, 1964; M.D., Harvard, 1968.*
Harvey A. Schneier. *B.A., Columbia, 1963; M.D., 1967*
Allan Schwartz. *B.S., College of the City of New York, 1967; M.S., Harvard, 1968; M.D. Columbia, 1974*
Eve E. Slater. *B.A., Vassar, 1967; M.D., Columbia, 1971*
Jeffrey A. Stein. *A.B., Harvard, 1960; M.D., 1965*
Joseph Tenenbaum. *B.A., Brandeis, 1968; M.D., Harvard, 1974.*
Cornelius J. Tyson. *B.A., Princeton, 1939; M.D., Columbia, 1943*
Herbert C. Weber. *M.D., Hebrew, (Israel), 1964*
Earl A. Wheaton, Jr. *B.A., Princeton, 1950; M.D., Columbia, 1954*
Gail S. Williams. *B.A., Wellesley, 1964; M.D., Columbia, 1968*

Assistant Professors

Ned S. Braunstein. *B.S., Northwestern, 1978; M.D. 1980*
Gary R. Burke. *B.A., St. Mary's, 1969; M.D., Minnesota, 1973*
L. David Carmichael. *A.B., Harvard, 1969; M.D., Albert Einstein, 1976*
Ivon E. Cayre (also Physiology & Cellular Biophysics). *M.D., Montpellier School of Medicine (France), 1972; D.Sc., Paris University (France), 1978*
James J. Cimino. *B.S., Brown, 1977; M.D., New York Medical College, 1981*
Nadim E. Cortas. *B.S., American University of Beirut, 1963; M.D., 1967*
Robin S. Goland. *B.A., Radcliffe, 1976; M.D., Columbia, 1980*
Charles S. Hesdorffer. *M.B.,Ch.B., Witwatersrand (South Africa), 1978*

Alexander A. Hindenberg. *B.S., State University of New York (Stony Brook), 1974; M.D., Rutgers, 1978*
Evelyn Horn. *B.A., Brown, 1976; M.D., Mt. Sinai, 1980*
Jose Katz (also Radiology). *B.S., Illinois, 1963; M.S., 1964; Ph.D., 1967; M.D., Berlin, 1980*
Seth Lederman. *A.B., Princeton, 1979; M.D., Columbia, 1983*
Jacques P. Merab. *B.S., Massachusetts Institute of Technology, 1976; M.D., Harvard, 1980*
Stephen A. Morris. *B.S., Pennsylvania; M.D., Albert Einstein, 1978*
Alan J. Moskowitz. *B.A., Vermont, 1974; M.D., New York Medical College, 1978*
Alfred I. Neugut (also Public Health) (Epidemiology). *Ph.D., M.D., Columbia, 1977*
Peter Salgo (also Anesthesiology). *B.A., Columbia, 1971; M.D., 1975*
Elizabeth Shane. *B.S., Dalhousie, 1969; M.D., Toronto, 1975*
Steven J. C. Shea (also Public Health). *A.B., Harvard, 1968; M.D., Columbia, 1979*
Shonni Silverberg (Irving Assistant Professor). *B.A., Wesleyan, 1976; M.D., Cornell, 1980*
Susan F. Steinberg (also Pharmacology). *B.S., Massachusetts Institute of Technology, 1972; M.D., Harvard, 1976*
Ira A. Tabas (also Anatomy & Cell Biology). *B.S., Tufts, 1975; M.D., Ph.D., Washington University (St. Louis), 1977*
Judah Z. Weinberger (also Pharmacology). *B.A., Columbia 1974; M.A., 1975; M.D., Ph.D., Harvard, 1980*

Assistant Professor of Anatomy & Cell Biology

Larry D. Witte. *B.S., Iowa State, 1970; Ph.D., 1974*

Assistant Professor of Genetics & Development

Maggi Allan. *B.A., Stirling (Scotland), 1975; Ph.D., Glasgow (Scotland), 1979*

Assistant Professor of Medical Informatics

Carol Friedman. *B.S., City College of New York, 1968; M.S., New York University, 1986; Ph.D., 1989*

Assistant Professors of Social Medicine

Sherry I. Brandt-Rauf (in the Center for the Study of Society & Medicine). *M. Phil, Columbia, 1978; J.D., 1981*
Stephen Hilgartner (in the Center for the Study of Society & Medicine). *B.A., Cornell, 1983; M.A., Pennsylvania, 1984*

Adjunct Assistant Professors

Paul J. Maddon. *B.A., Columbia, 1981; M.D., Ph.D., 1988*
Scott J. Mellis. *A.B., Johns Hopkins, 1977; M.D., Ph.D., Washington (St. Louis), 1984*

Assistant Professors of Clinical Medicine

Myles Akabas. *B.A., Cornell, 1977; M.D., Albert Einstein, 1982*
Mark Apfelbaum. *B.A., Yeshiva, 1977; M.D. Columbia, 1981*
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Audrey Compton, M.D.
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Robert Lindsay. *M.P.C.B., Glasgow, 1968; Ph.D., 1969*

Assistant Professor of Clinical Medicine

Felicia Cosman. *B.A., Cornell, 1979; M.D., State University of New York (Stonybrook), 1983*

Assistant Clinical Professors

Alfred Becker. *B.A., Yeshiva, 1958; M.D., Albert Einstein, 1962*
Marjorie Louise King. *M.D., Pennsylvania, 1982*
Jack Tohme. *B.Sc., American University of Beirut, 1970; M.D., 1974*

INSTRUCTORS IN CLINICAL MEDICINE

Hannah Zackson, M.D.

At Morristown Memorial Hospital

Professor of Clinical Medicine

Albert S. Klainer. *B.S., Massachusetts Institute of Technology, 1957; M.D., Tufts, 1961*

Clinical Professor

John S. Banas, Jr. *B.S., Tufts, 1959; M.D., 1963*

Assistant Clinical Professors

Kenneth R. Adler. *B.S., Pittsburgh, 1968; M.D., Albany Medical College, 1973*
Mark T. Atkins. *B.A., Rochester, 1966; M.D., George Washington, 1969*
Hillel Ben-Asher. *A.B., Chicago, 1952; M.D., 1956*
Emil Bisaccia (also Dermatology). *B.A., Ohio State, 1974; M.D., Medical College of Ohio, 1979*
Joel E. Cannilla. *B.S., Mt. St. Mary's 1956; M.D., Seton Hall, 1960*
Robert A. Capone. *B.A., New York University, 1974; M.D., Columbia, 1978*
Alan Chanin. *B.A., Franklin & Marshall (Pennsylvania), 1973; M.D., Albert Einstein, 1976*
Kevork Cileli. *M.D., Ankara (Turkey), 1957*
Bernard Davidoff. *B.A., St. John's, 1969; M.D., Columbia, 1973*
Barry Efros. *B.A., George Washington, 1970; M.D., College of Medicine & Dentistry of New Jersey, 1974*
Joel R. L. Ehrenkranz. *M.D., Stanford, 1977*
Joseph F. Fennelly. *B.S., Seton Hall, 1952; M.D., New York Medical College, 1956*
Paul L. Fine. *B.S., Haverford, 1975; M.D., Yale, 1979*
Arthur Fisch. *B.A., Rutgers, 1965; M.D., Boston, 1969*
Stuart Warren Fox. *B.A., Cornell (Ithaca), 1971; M.D., 1975*
Arthur J. Geller. *A.B., Dartmouth, 1954; M.D., Chicago, 1959*
Gary Gerstein. *B.S., St. Joseph's (Pennsylvania), 1969; M.D., Jefferson, 1973*
Stephen Guss. *B.A., Yale, 1964; M.D., Harvard, 1968*
Oscar R. Kruesi. *B.S., Union (Schenectady), 1947; M.D., Cornell, 1951*
David S. Lerman. *B.A., New York University, 1964; M.D., Hahnemann, 1968*
Robert V. McCormick. S.B., Harvard, 1944; *M.D., 1946*
Sudhir Mehta. *B.S., Bombay, 1967; M.B.,B.S., 1972*
Earl Nielson. *B.S., City College of New York, 1962; M.D., Vermont, 1966*
Mark A. Oliver. *B.S., Vermont, 1967; M.D., Chicago, 1971*
Stephen W. Papish. *B.A., Pennsylvania, 1970; M.D., 1974*
Richard A. Paul. *M.D., Barcelona, 1976*
William M. Petkun. *A.B., Harvard, 1978; M.D., New York University, 1982*
William S. Pond. *B.S., Michigan, 1973; M.D., Tufts, 1977*
John E. Rossman. *M.D., Illinois, 1966*
Joseph J. Ryan. *B.S., Notre Dame, 1965; M.D. State University of New York (Downstate), 1970*
John S. Salaki. *B.S., Mount St. Mary's, 1967; M.D., College of Medicine and Dentistry of New Jersey, 1971*
Michael A. Samach. *A.B., Cornell, 1967; M.D., New York University, 1971*
Craig A. Schiffner. *B.A., Princeton, 1973; M.D., George Washington, 1977*
Felix Schletter. *B.S., Rutgers, 1954; M.D., State University of New York (Albany), 1958*
Nassare-Din Shariati. *M.D., National University of Iran (Tehran), 1972*
Charles A. Shioleno. *M.D., Georgetown, 1977*
Lawrence B. Stein. *B.S., B.A., Minnesota, 1961; M.D., 1965*
James R. Sterret. *B.S., Virginia Military Institute, 1967; M.D., Virginia, 1971*
Jerrold M. Stock. *B.A., Northwestern, 1964; M.D., Chicago, 1968*
Gary Weine. *B.S., Queens, 1972; M.D., Cornell, 1976*
David Widman. *B.A., New York University, 1971; M.D., Harvard, 1975*
Barry Zitomer. *B.A., Rutgers, 1959; M.D., Pennsylvania, 1963*

INSTRUCTORS IN CLINICAL MEDICINE

Steven Adler, M.D.
Jon William Brunswick, M.D.
Donald P. Burt, M.D.
Ronald Ciuffreda, M.D.
John J. Delaney, M.D.
Pamela G. Freedman, M.D.
Robert S. Freid, M.D.
Peter Gallerstein, M.D.
Lee W. Geller, M.D.
Eugenie George, M.D.
Steven Mark Gudis, M.D.
Arthur N. Hoaglund, M.D.
Ibrahim Housri, M.D.
Stephen Krasnica, M.D.
David Lewin, M.D.
Stelio Mangiola, M.D.
James S. Najarian, M.D.
Marilyn Orenstein, M.D.

INSTRUCTORS *(continued)*

Michael Orenstein, M.D.
John Penek, M.D.
Celso S. Puno, M.D.
Ralph Reichert, M.D.
Barry Reiter, M.D.
Carmen Renna, M.D.
Marie Lalor Rozan, M.D.
Stephen W. Rozan, M.D.
Leslie David Schlesinger, M.D.
Zalman R. Schrader, M.D.
Stephen Mark Schreibman, M.D.
Dean C. Shore, M.D.
Jay I. Stack, M.D.
John G. Valeri, M.D.
Richard Ira Watson, M.D.
Bennett Weissglass, M.D.
Paul H. Wichman, M.D.

At Overlook Hospital

Clinical Professor

Michael Bernstein. *M.D., New York Medical College, 1953*

Associate Professor of Clinical Medicine

John J. Gregory. *B.S., Worcester Polytechnic Institute, 1953; M.D. State University of New York (Albany), 1961*

Associate Clinical Professors

Joel L. Duberstein (Family Practice). *B.A., Princeton, 1957; M.D., Columbia, 1961*
Mary T. Herald. *B.A., New Rochelle, 1965; M.D., College of Medicine and Dentistry of New Jersey, 1969*

Assistant Clinical Professors

Michael Algus. *B.A., State University of New York (Buffalo), 1975; M.D., State University of New York (Downstate), 1979*
Lloyd Howard Alterman. *B.A., State University of New York (Stony Brook), 1973; M.D., Wayne, 1977*
Kevin Edmund Bell. *M.D., Columbia, 1975*
Kenneth Brin. *Sc.B., Brown, 1969; M.D.,Ph.D., New York University, 1975*
Fred G. Bromberg. *B.A., Johns Hopkins, 1974; M.D., Rochester, 1978*
Stuart Burstin. *B.A., Boston, 1969; M.D.,Ph.D., New York University, 1975*
Stephen J. Fischl. *B.A., Seton Hall, 1963; M.D., College of Medicine and Dentistry of New Jersey, 1967*
Robert A. Fuhrman. *B.A., Clark, 1962; M.D., Chicago, 1966*
J. Scott Gillin. *B.A., Cornell, 1974; M.S., Columbia, 1975; M.D., College of Medicine and Dentistry of New Jersey, 1979*
Carl S. Goldstein. *B.A., Cornell, 1973; M.D., Washington, 1978*
Peter L. Goodluck. *M.B.,B.S., Medical College (Bombay), 1958*
Samuel M. Gray. *B.S., Chicago, 1963; M.D., 1967*
E. Thomas Holland (Family Practice). *B.A., Wesleyan, 1971; M.D., Chicago, 1975*
Thomas V. Inglesby. *B.S., Mt. St. Mary's., 1959; M.D., Maryland, 1963*
Susan T. Kaye. *B.S. Brown, 1975; M.D., New York University, 1979*
Michael B. Kerner. *B.S., Rutgers, 1967; M.D., Bowman Gray, 1971*
Joel D. Levinson. *B.A., Cornell, 1959; M.D., Georgetown, 1963*
Joseph G. Loeffler, *B.A., Holy Cross, 1972; M.D., Albert Einstein, 1978*
Michael Stephen Lux. *B.S., City University of New York, 1973; M.D., New York University, 1977*
Lawrence J. Nastro. *B.A., Brooklyn, 1961; M.D., State University of New York (Downstate), 1965*
Steven J. Stanzione. *B.A., Georgetown, 1962; M.D., College of Medicine and Dentistry of New Jersey, 1966*

William A. Tansey, III. *B.A., Yale, 1966; M.D., Columbia, 1970*
Lorraine L. Tosiello. *B.A., New York University, 1975; M.D., State University of New York (Downstate), 1981*
William N. Toth. *B.S., Georgetown, 1956; M.D., Hahnemann, 1960*
William E. Wagner, Jr. *B.A., Princeton, 1945; M.D., Columbia, 1950*
Richard Weinberg. *B.S., Rensselaer Polytechnic Institute, 1970; M.D., Union, 1970*
Donald H. Wernsing (Family Practice). *M.D., Hahnemann, 1975*

INSTRUCTORS IN CLINICAL MEDICINE

Joseph A. Belladonna, M.D.
Donald J. Brock, M.D.
H. Oliver Brown, Jr., M.D.
Kopel Burk, M.D.
Joseph A. Clemente, M.D.
Andrew Coronato, Jr., M.D.
Ann Petra D'Adamo, M.D.
Rosina B. Dixon, M.D.
Charles E. Dooley, Jr., M.D.
Joseph T. Faraldo, M.D.
John P. Farry, M.D.
Robert B. Francis, M.D.
Trina Frankel, M.D.
Harvey Gerhard, M.D.
David E. Guyer, M.D.
Eugene R. Kelly, .D.
Thomas H. Kloos, M.D.
A. Ralph Kristeller, M.D.
Kerry S. Lebenger, M.D.
David I. Lintz, M.D.
Ines Linzmayer, M.D.
Marvin A. Lipsky, M.D.
Dennis A. Lowenthal, M.D.
Robert P. Margie, M.D.
David P. Miller, M.D.
Daniel J. Moriarty, M.D.
Sanford M. Reiss, M.D.
Robert L. Rosenbaum, M.D.
Melvin Rubinstein, M.D.
R. Gregory Sachs, M.D.
Robert D. Slama, M.D.
Robert R. Springer, M.D.
Elliott M. Stein, M.D.
David R. Stone, M.D.
Michael Suhl, M.D.
Michael J. Tighe, M.D.
Burton Tucker, M.D.
Michael B. Wax, M.D.
David Allen Worth, M.D.

At St. Luke's-Roosevelt Hospital Center

Professors

John F. Bertles. *B.S., Yale, 1945; M.D., Harvard, 1952*
Robert B. Case. *B.A., Wesleyan, 1953; M.D., Columbia, 1958*
Peter R. Holt. *B.Sc., Tolington, 1949; M.B.,B.S., London, 1954*
Gerald B. Phillips. *B.A., Princeton, 1946; M.D., Harvard, 1948*
William Rosner. *B.A., Wisconsin, 1954; M.D., Albert Einstein, 1961*
Gerard M. Turino (John H. Keating Professor). *B.A., Princeton, 1945; M.D., Columbia, 1948*
Harvey J. Weiss. *A.B., Harvard, 1951; M.D., 1955*

Adjunct Professor

Jules Hirsch. *B.S., Rutgers, 1944; M.D., Texas, 1948*

Professors of Clinical Medicine

A.L. Loomis Bell. *B.S., Wesleyan, 1944; M.D., Harvard, 1947*
Stanley Cortell. *B.S., Massachusetts Institute of Technology, 1957; M.D., Tufts, 1961*
Edward M. Dwyer. *B.A., Columbia, 1957; M.D., 1961*
Michael H. Grieco. *B.A., New York University, 1954; M.D., State University of New York (Downstate), 1957*
Harvey G. Kemp. *B.A., Oklahoma, 1955; M.D., Johns Hopkins, 1959*
Emil Pascarelli. *B.A., Columbia, 1952; M.D., Pavia (Italy), 1958*
F. Xavier Pi-Sunyer. *B.A., Oberlin, 1955; M.D., Columbia, 1959*
Richard N. Pierson, Jr. *B.A., Princeton, 1951; M.D., Columbia, 1955*
Miles J. Schwartz. *B.S., Queens (New York), 1947; M.D., New York University, 1961*

Clinical Professors

Richard P. Ames. *B.A., Williams, 1954; M.D. Columbia, 1958*
Jonas M. Goldstone. *S.B., Harvard, 1951; M.D., 1955*
Albert W. Grokoest. *B.S., Hamilton, 1940; M.D., Columbia, 1943*
Philip H. Henneman. *A.B., Harvard, 1943; M.D., 1946*
Richard McCray. *B.A., Wesleyan, 1954; B.D., Yale, 1957; M.D. Columbia, 1962*

Senior Research Scientist

Beatrice M. Fairchild. *B.A., Hunter, 1942; M.A., Bryn Mawr, 1943; Ph.D., 1948*

Associate Professor

Steven B. Heymsfield. *B.A., Hunter, 1966; M.D., Mt. Sinai, 1971*

Associate Professors of Clinical Medicine

Judith Axelrod. *B.S., Wellesley, 1953; M.D., Cornell, 1967*
C. Redington Barrett. *B.A., Yale, 1955; M.D., Columbia, 1959*
Robert S. Bernstein. *B.A., Columbia, 1961; M.D., Harvard, 1965*
Norma M.T.W. Braun. *B.A., Pennsylvania, 1959; M.D., Columbia, 1963*
Jeffrey M. Brensilver. *M.D., Columbia, 1971*
Airlie A. Cameron. *B.A., Radcliffe, 1957; M.D., McGill, 1961*
Henry M. Greenberg. *B.A., Pennsylvania, 1961; M.D., Tufts, 1968*
Donald Philip Kotler. *M.D., Albert Einstein, 1973*
Michael Lange. *M.D., Toronto, 1968*
Marianne J. Legato. *B.A., Manhattanville, 1956; M.D., New York University 1962*
Michelle P. Warren (also Obstetrics & Gynecology). *B.A.,Mt. Holyoke, 1961; M.D., Cornell, 1965*

Associate Clinical Professors

Albert Attia. *B.A., Cornell, 1955; M.D., 1958*
Carlton Boxhill. *B.A., Columbia, 1964; M.D., 1968*
Norman A. Cagin. *B.S., Rutgers, 1963; M.D., New York Medical College, 1967*
Richard Collens. *B.S., Massachusetts Institute of Technology, 1959; M.D., New York Medical College, 1966*
George Dermksian. *B.A., Columbia, 1948; M.A., Tulane, 1950; M.D., Cornell, 1954*
James B. Gabriel. *B.A., Brown, 1945; M.D., Harvard, 1949*
Oscar Garfein. *B.A., Columbia, 1961; M.D., 1965*
Arthur Karanas. *B.A., New York University, 1954; M.D., State University of New York (Downstate), 1958*
Ronald Kraft. *B.S., Michigan, 1966; M.D., Cincinnati, 1970*
Arthur J. Lennon. *B.A., Fordham, 1956; M.D., Columbia, 1960*
Jonathan A. Lorch. *B.A., Wisconsin, 1968; M.D., Tulane, 1972*
Mary Elizabeth O'Brien. *B.A., Vassar, 1973; M.D., Harvard, 1977*
Myron C. Patterson. *B.A., Columbia, 1939; M.D. 1943*
Bruce H. Pinkernell. *B.A., Johns Hopkins, 1960; M.D., 1964*
Norton S. Rosensweig. *B.A., Princeton, 1957; M.D., New York University, 1961*
Jean W. Saleh. *B.A., St. Joseph (Beirut), 1957; M.D., Faculté Française de Médecine, 1964*
Eugene Santilli. *B.S., City College of New York, 1958; M.D., Medical University of Bologna, 1964*
Lawrence Scharer. *B.A., Columbia, 1954; M.D., 1958*
Seiichi Shimomura. *M.D., Okayama (Japan), 1945*
Gerald Weintraub. *B.A., New York University, 1950; M.D., 1954*
Herman Ziffer. *B.A., Brooklyn, 1949; M.D., Chicago, 1953*

Assistant Professors

Beatrice De La Fuente. *B.S., Miguel Angel Institute(Mexico), 1966; M.D., National Autonomous University (Mexico), 1973*
Judith S. Hochman. A.M., Harvard, 1974; *M.D., 1977*
Craig E. Metroka. *B.A., Holy Cross, 1971; M.S., New York University, 1975; M.D., Ph.D., 1978*

Assistant Professor of Clinical Physiology & Cellular Biophysics

Jahar Bhattacharya. *M.B.,B.S., India Institute of Medicine (New Delhi), 1968; M.S., Ph.D., Oxford, 1973*

Assistant Professors of Clinical Medicine

David Barenberg. *A.B., Cornell, 1974; M.D., State University of New York (Downstate), 1980*
Tamar F. Barlam. *B.S., City University of New York, 1977; M.D., Rochester, 1979*
Bertha Ann Bauer. *B.A., Smith, 1973; M.D., Columbia, 1977*
Edward W. Colt. *M.D., University of London, 1962*
Michael S. Conjalka. *B.S., Indiana, 1962; M.D., Northwestern, 1973*
Robin Jane Dibner. *B.S., Michigan, 1974; M.D., Wayne State, 1979*
Edward Eden. *M.B.,B.S., St. Mary's Hospital Medical School, 1975*
C. David Finley. *B.S., Albuquerque, 1972; M.D., State University of New York, (Buffalo), 1977*
Ann Geller. M.A., Oxford, 1957; *M.D., London, 1960*
Patrick H. Griffin. *B.A., Columbia, 1976; M.D., 1980*
Katherine A. Hawkins. *B.A., Manhattanville, 1964; M.D., Columbia, 1973*
Kenneth J. Herwig. *B.A., State University of New York (Syracuse), 1967; M.D. Pennsylvania State, 1971*
Christopher Hoy. *A.B., Harvard, 1971; M.S., London School of Economics, 1972; M.D., Albert Einstein, 1977*
Gregg Armin Husk. *B.S., Chicago, 1970; M.D., 1975*
Gertrude Scott Lefavour. *B.A., Goucher, 1965; M.D., Medical College of Pennsylvania, 1970*
Randy Lyn Levine. *B.S., Cornell, 1975; M.D., State University of New York (Buffalo), 1979*
Allen Mogtader. B.A, Columbia, 1966; *M.D., State University of New York (Downstate), 1970*
Marcia Naveh. *M.S., Tulane, 1972; M.D. Albert Einstein, 1977*
Kenneth R. Ong. *B.S., Michigan, 1972; M.D., Wayne, 1976*
Milayna Subar. *B.A., Barnard, 1976; M.D., State University of New York (Buffalo), 1980*

Assistant Clinical Professors

Kenneth A. Altman. *B.A., Cornell, 1950; M.D., Columbia, 1954*
Wendy Aronson. *B.A., Vassar, 1965; M.D., New York University, 1968*
William J. Athos. *B.A., Columbia, 1942; M.D., State University of New York (Downstate), 1956*
John Thomas Barnard. *M.D., Texas, 1976*
Harvey Benovitz. *B.A., Washington & Jefferson, 1958; M.D., Albert Einstein, 1962*
Robert Bernot. *B.A., Columbia, 1955; M.D., State University of New York (Buffalo), 1960*
Earl B. Brown. *B.S., Emory, 1938; M.D., 1942*
Richard Gunnar Carlson (also Pediatrics). *B.S., Trinity (Hartford), 1966; M.D., Columbia, 1970*
David Stewart Carroll. *B.A., Colgate, 1969; M.D., Columbia 1973*
Daniel S.J. Choy. *B.A., Columbia, 1944; M.D., 1949*
Paul Chrzanowski. *B.A., Dartmouth, 1966; B.M.S., 1978; M.D., Washington, 1970*
Kay Barbara Cynamon. *B.A., Pennsylvania, 1973; M.D., 1977*
Donald P. Dallas. *B.A., Columbia, 1950; M.D., 1954*
Samuel J. Daniel. *B.A., Queens (New York),1974; M.D., Columbia, 1978*
Howard P. Dembin. *B.S. City University of New York, 1972; M.D., Mt. Sinai, 1976*
Robert K. Emy. *B.A. New York University, 1952; M.D., Medical College of Virginia, 1957*
Donald R. Fishman. *B.A., Rochester, 1969; M.D., Pennsylvania, 1973*
Martin Jay Frankel. *B.A., Columbia, 1968; M.D. State University of New York (Buffalo), 1972*

Richard P. Fried. *B.A., Brown, 1964; M.D.,Columbia, 1968*
Zane Gaut. *B.S., Birmingham Southern, 1950; M.D., Tulane, 1954*
Richard Geltman. *B.A., Rutgers, 1967; M.D., Albert Einstein 1971*
Joseph D. Granderson. *B.S., City University of New York, 1971; M.D., Albert Einstein, 1975*
Joseph A. Grossman. *B.S., City College of New York, 1953; M.D., State University of New York (Downstate), 1957*
Gregory Miner Gustafson. *B.A., Yale, 1971; M.D., Columbia, 1977*
George Haroutiounian. *B.A., Queens, 1975; M.D., Rochester, 1979*
Julian B. Hyman. *B.A., Columbia, 1945; M.D., State University of New York (Albany), 1947*
Michael R. Irwin. B.*B.A., Texas, 1968; M.D., Texas Southwestern, 1975*
Annetta J. Kimball. *B.A., Mt. Holyoke, 1964; M.D., Boston, 1968*
Mark Henry Kinn. *B.A., Brooklyn, 1972; M.D., New York University, 1977*
Edith Joan Langner. *B.A., Michigan, 1965; M.D., New York University, 1969*
Sharon Lewin. *M.D., Toronto, 1975*
Barbara K. Lipton. *B.S., Massachusetts Institute of Technology, 1977; M.D., State University of New York (Buffalo), 1981*
Robert P. Lombardo. *B.S., Notre Dame, 1966; M.D., New York Medical College, 1970*
Athanasius Mallios. *B.A., Columbia, 1968; M.D., State University of New York (Upstate), 1973*
David K. Meriney. *B.A., Duke, 1956; M.D., 1960*
Robert Allen Meyers. *A.B., Dartmouth, 1972; B.M.S., 1974; M.D., Columbia, 1976*
Lawson A. Moyer, III. *B.A., Virginia, 1968; M.D., 1972*
Carl H. Nacht. *B.S., State University of New York (Stony Brook), 1971; M.D., Temple, 1976*
Thomas M. Nall. *B.A., Wesleyan, 1955; M.D., Cornell, 1959*
William M. Nicholas. *B.A., Williams, 1950; M.D., State University of New York (Syracuse), 1954*
Paul Martin Nonkin. *B.A., New York University, 1950; M.D., New York Medical College, 1954*
Mary Margaret O'Sullivan. *B.A., Fordham, 1971; M.D. Cornell, 1975*
John J. Olichney. *B.S., Rutgers, 1965; M.D., State University of New York (Albany), 1969*
Angela A. Palazzo. *B.S., Fairleigh Dickenson, 1975; M.D., State University of New York (Downstate), 1980*
Barbara Lynn Parks. *B.A., Wisconsin, 1971; M.D., 1978*
Anthony J. Pepe. *B.S., St John's (New York), 1966; M.D., Columbia, 1970*
Arnold Morris Phillips. *B.S., Massachusetts Institute of Technology, 1974; M.D. Columbia, 1978*
Nancy Roistacher. *M.D. New York Medical College 1975*
Robert B. Roven. *B.A., Columbia, 1953; M.D. 1957*
Peter J. Santogade. *M.D., Wisconsin, 1978*
Morton Schwimmer. *B.A., Lafayette (Pennsylvania), 1948; M.D., Jefferson, 1951*
Mark V. Sherrid. *B.A., Cornell, 1969; M.D., Columbia, 1972*
Harry L. Ulrich. *B.S., Heidelberg, 1973; M.D., State University of New York (Buffalo), 1977*
Kenneth N. Weinstein. *B.A., Vermont, 1955; M.D., New York University, 1959*
William P. Winkler. *B.S., Brown, 1972; M.S., Polytechnic Institute of New York, 1974; M.D., Columbia, 1978*
Michelle L. Winter. *B.A., Barnard, 1971; M.D., Cornell, 1975*
David Wolinsky. *B.A., Columbia, 1974; M.D., 1978*
Franklin H. Zimmerman. *B.A., Brown, 1976; M.D., 1980*

Associate Research Scientists

Thalia Boussios. *B.S., Columbia, 1965; M.S., New York University, 1977; Ph.D., 1978*
Bonnie Bray. *B.S., Georgia, 1950; Ph.D., Columbia, 1963*
Yoritaro Inada. *D.V.M., School of Veterinary Medicine (Tokyo), 1969; Ph.D., 1975*
M. Saeed Khan. *M.S., Brown, 1964; Ph.D., Imperial College of Science and Technology (London), 1966*
Bruce R. Lages. *B.S., Stevens Institute of Technology, 1964; M.S., 1967; Ph.D., 1972*
Mohan Muthireval Reddy. *B.S., Agricultural College (India), 1963; M.S., Indian Agricultural Research Institute, 1966; Ph.D., Chicago, 1969*
Mei-Uih Yang. *B.Ed., National University of Taiwan, 1959; M.S., Columbia, 1967; Ph.D., 1976*
Kwo-Yih Yeh. *B.S., National University of Taiwan, 1965; Ph.D., Washington (St. Louis), 1975*

SPECIAL LECTURERS

William S. Clark, M.D.
A. Gregory Jameson, M.D
Henry G. Shaffeld, M.D.
Myron Wright, M.D.

LECTURERS

Martin Finkel, M.D.
David Schwimmer, M.D.

ASSOCIATES IN CLINICAL MEDICINE

Jeannine B. Albu, M.D.
Lisa E. Babitz, M.D.
Vernon G. Baker, M.D.
Michael S. Baum, M.D.
Elizabeth Jane Beautyman, M.D.
Michael Borecky, M.D.
John Thomas Cappadona, M.D.
Albert Cohen, M.D.
John Cohn, M.D.
John Cornwall, M.D.
Jane-Iris R. Farhi, M.D.
Jeanne Fastook, M.D.
Eugene Freundlich, M.D.
Youssef Ghassibi, M.D.
Andrew M. Goldmann, M.D.
Carolyn E. Goodstein, M.D.
Barry E. Goozner, M.D.
Antoine C. Harovas, M.D.
Karl R. Hoffman, M.D.
Herbert Ivan Jernow, M.D.
Alan Bruce Kadet, M.D.
John Liu, M.D.
George F. McKinley, M.D.
Woodson Charles Merrell, M.D.
Nicholas H. E. Mezitis, M.D.
Laura K. Millman, M.D.
Thomas C. Moore III, M.D.
Norman C. Peeler, M.D.
Michael I. Rauchman, M.D.
Guy A. Renvoize, M.D.
Nicholas Steiner, M.D.
Thomas Tamlyn, M.D.
Walter Gabriel Wasser, M.D.

INSTRUCTORS IN CLINICAL MEDICINE

Joseph R. Ades, M.D.
Eric Andreae, M.D.
Elliot Arons, M.D.
Lestrino C. Baquiran, M.D.
David H. Baskin, M.D.
Hillard M. Boskey, M.D.
Valerie A. Brackett, M.D.

INSTRUCTORS *(continued)*

Cecil B. Broderick, M.D.
Daniel L. Brook, M.D.
Daniel Henry Cohen, M.D.
Hugh C. Davidson, M.D.
Pedro De Armas, M.D.
Luziano Del Guzzo, M.D.
Margaret Dessau, M.D.
William E. Edelheit, M.D.
Alan D. Egelman, M.D.
Jerome Paul Ehrlich, M.D.
Arthur Englard, M.D.
Jason Faller, M.D.
Stuart W. Forster, M.D.
Etta Rae B. Frankel, M.D.
Dennis Gage, M.D.
Lorraine M. Giordano, M.D.
Aron Goldman, M.D.
Stewart W. Greisman, M.D.
Martin J. Hecht, M.D.
Wade A. Johnson, M.D.
Mitchell Kahn, M.D.
Robert Stanley Karol, M.D.
Martin Philip Kasofsky, M.D.
Jeanne Florence Kassler, M.D.
Carol Tracy Larson, M.D.
Marcel Laufer, M.D.
James David Lax, M.D.
Andrew C. Leifer, M.D.
Robin Lipschitz, M.B., Ch.B.
Alfred Miller, M.D.
Grace Y. Minamoto, M.D.
Richard Ross Neufeld, M.D.
Lazare Novack, M.D.
Annette Osher, M.D.
Sonia M. Perez-Padilla, M.D.
Martin Saul Pine, M.D.
Lonny Reisman, M.D.a
Ernest C. Richards, M.D.
Harry A. Roselle, M.D.
Barry Richard Rudin, M.D.
Gabriel A. Sara, M.D.
Carol B. Schreck, M.D.
Howard N. Schwartz, M.D.
Kent A. Sepkowitz, M.D.
Michael S. Siegal, M.D.
Janice E. Siglin, M.D.
Gregory B. Steinberg, M.D.
Thomas V. Tupper, M.D.
Steven J. Weiss, M.D.
Michael J. Wiechowski, M.D.
Daniel C. William, M.D.
Paul E. Wiseman, M.D.

Microbiology

Professor and Acting Chairman

Saul J. Silverstein. *B.S., Cornell, 1968; Ph.D., Florida, 1971*

Professors

Frederick W. Alt (in Biochemistry & Molecular Biophysics). *B.S., Brandeis, 1971; Ph.D., Stanford, 1978*
Kathryn L. Calame (also Biochemistry & Molecular Biophysics). *B.S., Missouri, 1962; M.S., George Washington, 1965; Ph.D., 1975*
Dickson D. Despommier (in Public Health). *B.S., Fairleigh Dickinson, 1962; M.S., Columbia, 1964; Ph.D., Notre Dame, 1967*
Bernard F. Erlanger. *B.S., College of the City of New York, 1943; M.A., New York University, 1948; Ph.D., Columbia, 1951*
Gabriel C. Godman (also Pathology). *B.A., New York University, 1941; M.D., 1944*
Stephen Goff (also Biochemistry & Molecular Biophysics). *B.A., Amherst, 1973; Ph.D., Stanford, 1978*
Maxwell E. Gottesman (Charles H. Revson Professor) (also Biochemistry & Molecular Biophysics) (in the Institute for Cancer Research. *B.A., Swarthmore, 1956; M.D., Yale, 1960;Ph.D., 1965*
Benvenuto Pernis (also Medicine). *M.D., Milan, 1947*
Vincent Racaniello. *B.A., Cornell, 1974; Ph.D., Mt. Sinai, 1979*

Associate Professors

Philip A. D'Alesandro (in Public Health). *B.S., Rutgers, 1952; M.S., 1954; Ph.D., Chicago, 1958*
David H. Figurski. *B.S., Pittsburgh, 1969; Ph.D., Rochester, 1974*
Howard A. Shuman. *B.S., Massachusetts, 1974; Ph.D., Harvard, 1979*
Charles Stuart Hamish Young. *B.A., Oxford, 1966; Ph.D., 1969*

Assistant Professors

Alexander D. Goldfarb. *Diploma, Moscow State University, 1969; Ph.D., Weizmann Institute (Israel), 1980*
Aaron P. Mitchell (in the Institute for Cancer Research). *B.S., Carnegie-Mellon, 1977; Ph.D., Massachusetts Institute of Technology, 1984*
David M. Shore. *B.A., Harvard, 1977; Ph.D., Stanford, 1983*
Alan M. Stall. *A.B., Brown, 1974; Ph.D., Chicago, 1983*
Lorraine S. Symington (in the Institute for Cancer Research). *B.S., Glasgow, 1975; Ph.D., Sussex, 1982*

Adjunct Assistant Professors

Vincent Bonagura. *B.A., Columbia, 1971; M.D., 1975*
George Yancopoulos. *B.A., Columbia, 1980; Ph.D., 1986; M.D., 1987*

Associate Research Scientist

William L. Cleveland. *B.S. Columbia, 1967; Ph.D., Rutgers, 1975*

SPECIAL LECTURERS

Paul Ellner, Ph.D.
Harold Ginsberg, M.D.
Elvin A. Kabat, Ph.D.
Wladyslaw Manski, D.Sc.

SENIOR LECTURER

Russell E. MacDonald, Ph.D.

At Harlem Hospital Center

Associate Clinical Professor of Pathology

Angus Sampath. *D.Sc., Strasbourg, 1966*

At St. Luke's-Roosevelt Hospital Center

Senior Research Scientist

George A. Hashim (also Surgery). *Ph.D., Columbia, 1967*

Neurological Surgery

Byron Stookey Professor and Chairman

Bennett M. Stein. *B.A., Dartmouth, 1952; M.D., McGill, 1955*

At Presbyterian Hospital

Professors of Clinical Neurological Surgery

Peter W. Carmel. *B.A., Chicago, 1956; M.D., New York University, 1960*
James W. Correll. *B.A., Brown, 1941; M.D., Cornell, 1944*
Edgar M. Housepian. *B.A., Columbia, 1949; M.D., 1953*
James G. McMurtry, III. *B.A., Rice, 1953; M.D., Baylor, 1957*
Kalmon Post. *B.A., Columbia, 1963; M.D., New York University, 1967*
Donald Oliver Quest. *B.S., Illinois, 1961; M.D., Columbia, 1970*

Professor of Clinical Psychiatry

Joseph Jaffe. *B.A., Columbia, 1944; M.D., New York University, 1947*

Assistant Professor

Robert A. Solomon. *B.A., Yale, 1976; M.D., Johns Hopkins, 1980*

Assistant Professors of Clinical Neurological Surgery

Ronald Brisman. *B.A., Harvard, 1961; M.D., 1965*
Jeffrey N. Bruce. *B.A., Virginia, 1978; M.D., Rutgers, 1983*
Paul C. McCormick. *B.A., Columbia, 1978; M.D., 1982*
Michael B. Sisti. *B.E., Cooper Union School of Engineering, 1977; M.D., Columbia, 1981*

Assistant Clinical Professor

George L. Becker. *B.A., Johns Hopkins, 1950; M.D., Hahnemann, 1954*

Associate Research Scientist

Gregory J. Duigou. *B.S., Connecticut, 1978; M.S., Kentucky, 1981; Ph.D., 1985*

INSTRUCTORS IN CLINICAL NEUROLOGICAL SURGERY

Duncan B. Carpenter, M.D.
Alfred A. Steinberger, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professors

Bruce Stephens Harris. *M.D., Hahnemann, 1968*
Ernest R. Levy. *M.B.,Ch.B., Witwatersrand (South Africa), 1965*

At Harlem Hospital Center

Assistant Clinical Professors

James E.O. Hughes. *B.A., Yale, 1958; M.D., Pennsylvania, 1962*
Robert W. Schick. *M.D., New York Medical College, 1952*

INSTRUCTOR IN CLINICAL NEUROLOGICAL SURGERY

George V. Di Giacinto, M.D.

At Morristown Memorial Hospital

INSTRUCTOR IN CLINICAL NEUROLOGICAL SURGERY

Allen I. Gardner, M.D.

At Overlook Hospital

Clinical Professor

Henry Robert Liss. *M.D., Jefferson Medical College, 1948*

Neurology

Henry & Lucy Moses Professor and Chairman

Lewis P. Rowland. *B.S., Yale, 1945; M.D., 1948*

At Presbyterian Hospital

Professors

Darryl C. DeVivo (Sidney Carter Professor) (also Pediatrics). *B.A., Amherst, 1959; M.D., Virginia, 1964*
Salvatore DiMauro. *M.D., Padova (Italy), 1963*
Stanley Fahn (H. Houston Merritt Professor). *B.A., California (Berkeley), 1955; M.D., California (San Francisco), 1958*
Claude P.J. Ghez (also Physiology & Cellular Biophysics) (in the Center for Neurobiology & Behavior). *B.Sc., Geneva, 1960; M.D., Harvard, 1964*
William Allen Hauser (in the Sergievsky Center). *B.A., Case Western Reserve, 1958; M.D., St. Louis, 1962*
Arthur Karlin (Eugene Higgins Professor) (also Biochemistry & Molecular Biophysics and Neurology). *B.A., Swarthmore, 1957; Ph.D., Rockefeller, 1962*
Robert F. Lovelace. *B.S., London, 1953; M.R.C.P., 1958*
Audrey S. Penn. *B.A., Swarthmore, 1965; M.D., Columbia, 1960*
James H. Schwartz (also Physiology & Cellular Biophysics) (in the Center for Neurobiology & Behavior). *B.A., Columbia, 1954; M.D., New York University, 1959; Ph.D., Rockefeller, 1964*
Robert K.S. Wong. *B.S., McGill, 1970; Ph.D., Alberta, 1975*

Adjunct Professor

Roger Traub. *B.A., Princeton, 1967; M.D., Pennsylvania, 1972*

Professors of Clinical Neurology

Abe Chutorian (also Pediatrics). *B.A., Manitoba, 1949; B.S., 1952; M.D., 1957*
Arnold Gold (also Pediatrics). *B.A., Texas, 1947; M.S., Florida, 1949; M.D., Lausanne, 1950*
James F. Hammill. *B.S., LaSalle, 1947; M.D., Pennsylvania, 1948*
Jay P. Mohr (Daniel Sciarra Professor). *B.A., Haverford, 1958; M.S., M.D., Virginia, 1963*
Timothy A. Pedley. *B.A., Pomona, 1965; M.D., Yale, 1969*
Daniel Sciarra. *B.A., Harvard, 1940; M.D., 1943*

Professor of Clinical Psychiatric Social Work

Janet B. Williams (also Psychiatry). *B.S., Tufts, 1969; M.S., Columbia, 1974; D.S.W., 1981*

Clinical Professors

Robert E. Barrett. *B.A., William and Mary, 1953; M.D., Medical College of Virginia, 1957*
Robert A. DeNapoli. *M.D., Harvard, 1954*
Linda D. Lewis. *B.S., Bethany, 1961; M.D., West Virginia, 1965*
Joseph L. O'Brien. M.D, Cornell, 1950

Associate Professors

Eduardo Bonilla. *B.A., San Simon (Bolivia), 1957; M.D., Javerina (Bogota), 1964*
Lucien J. Cote. *B.S., Vermont, 1951; M.D., 1954*
Norman Latov. *B.A., Columbia, 1970; M.D., Ph.D., Pennsylvania, 1975*

Associate Professor of Clinical Neurochemistry

Hai Won Chang. *B.A., Ewha (Seoul), 1950; M.A., Wellesley, 1955; Ph.D., Columbia, 1961*

Associate Professor of Clinical Neuropharmacology

Robert S. Sloviter. *B.S., Drexel, 1973; Ph.D., Pennsylvania State, 1978*

Associate Professors of Clinical Neurology

Gary Abrams. *B.S., State University of New York (Buffalo), 1970; M.D., Pittsburgh, 1974*
Ronald G. Emerson (also Pediatrics). *B.S., Bates, 1971; M.D., New York University, 1975*
Mathew E. Fink. *B.A., Pennsylvania, 1972; M.D., Pittsburgh, 1976*
Edward B. Healton. *B.S., Oregon, 1964; M.D., Creighton, 1968*
William G. Johnson. *B.A., Princeton, 1963; M.D.,Columbia, 1967*
Richard Mayeux. *B.S., Oklahoma State, 1968; M.D., 1972*
James R. Miller. *B.A., Amherst, 1960; M.D., New York University, 1964*

Associate Professors of Clinical Neuropsychology

Isak Prohovnik (in Psychiatry and Radiology). *M.Sc., Lund (Sweden), 1980, Ph.D., 1981*
Nancy Sabin Wexler (also Psychiatry). *B.A., Radcliffe, 1967; Ph.D., Michigan, 1970*

Associate Clinical Professors

Michael Fetell. *B.A., Pennsylvania, 1967; M.D., Albert Einstein, 1972*
Marcelo Olarte. *B.S., Marist Brothers, 1962; M.D., Cuyo, 1970*
David L. Sagman. *A.B., Hamilton 1955; M.D., Virginia, 1959*
Stephen G. Shafer (in the Sergievsky Center). *B.A., Harvard, 1966; M.D., Columbia, 1970; M.P.H., 1977*
Joseph H. Willner. *B.A., Hamilton College, 1966; M.D., New York University, 1970*

Assistant Professors

David M. Blake. *B.S., Kentucky, 1979; M.D., 1984*
Mitchell F. Brin. *B.A., Pennsylvania, 1975; M.D., Columbia, 1979*
Carolyn B. Britton. *B.A., Oberlin, 1968; M.S., M.D., New York University, 1975*
Robert Burke. *B.A., Dartmouth, 1971; M.D., Cornell, 1975*
Jean L. Cadet (also Psychiatry). *M.D., Columbia, 1979*
Bruce J. Fisch. *B.A., Indiana, 1974; M.D., 1978*
Paul Greene. *B.S., Massachusetts Institute of Technology, 1967; M.S., Yale, 1975; M.D., Connecticut, 1980*
Joseph Herbert (Irving Assistant Professor) (also Pathology) (Neuropathology). *B.S., Hebrew (Jerusalem), 1971; M.D., 1975*
Dale Joseph Lange. *B.S., Siena College (Loudonville, NY), 1974; M.D., New York Medical College, 1978*
Karen S. Marder. *A.B., Cornell, 1979; M.D., 1983*
Rosella Medori. *M.D., Bologna, 1981*
Richard Miles. *B.S., London, 1972; M.S., 1976; Ph.D., Bristol, 1981*
Torbjoern G. Nygaard. *B.S., Worcester Polytechnic Institute, 1975; M.D., Case Western Reserve, 1980*
Seth Pullman. *B.S., McGill, 1975; M.D., 1979*
Ralph Sacco. *B.S., Cornell, 1979; M.D., Boston, 1983*
Mary Sano (Irving Assistant Professor of Neuropsychology). *B.S.S.S., Amherst, 1974; M.A., New York University, 1980; Ph.D., 1986*
Mark L. Scheuer (Irving Assistant Professor). *B.S., Pennsylvania, 1978; M.D. Chicago, 1983*
Thomas K. Tatemichi. *B.A., Brown, 1974; M.D., Cornell, 1978*
David S. Younger. *B.S., Michigan, 1976; M.D., Columbia, 1981*

Assistant Professor of Genetics & Development

Eric A. Schon. *B.S., Columbia, 1968; M.S., Cincinnati, 1973; Ph.D., 1982*

Assistant Professor of Neurogenetics

T. Conrad Gilliam (in Psychiatry). *Ph.D., Missouri, 1981*

Assistant Professor of Neuropathology

Ruth M. Gubits. *M.S., Albert Einstein, 1978; Ph.D., 1982*

Assistant Professors of Clinical Neurology

Susan B. Bressman. *B.A., Barnard, 1973; M.D., Columbia, 1977*
Ramamohana Kairam (also Pediatrics). *M.B.,B.S., Andhra Medical College (India), 1979*
Laura Lenihan. *B.A., Harvard, 1974; M.D., Cornell, 1978*
Theodore A. List. *B.A., Kalamazoo, 1963; M.D., Michigan, 1967*
Stanley R. Resor, Jr. *B.A., Yale, 1967; M.D., Columbia, 1972*

Assistant Professor of Clinical Neuropsychology

Yaakov Stern. *B.A., Tuoro College, 1975; M.A., City University of New York, 1982; Ph.D., 1983*

Assistant Clinical Professors

Frank Boschenstein. *B.A., Toronto, 1950; M.D., 1954*
Eugenia E. Gamboa. *B.A., Philippines, 1961; M.D., 1966*
Stanley W. Holstein. *B.S., George Washington, 1963; M.D., Georgetown, 1967*
Charles R. Plank. *B.A., Oklahoma, 1961; M.D., 1965*
Aaron Rabin. *B.A., Yeshiva, 1967; Ph.D., Rockefeller, 1974; M.D., Albert Einstein, 1976*
Kuldip P. Sachdev. *M.B.,B.S., Agra (India), 1957; M.D., Punjab, 1962*

Associate Research Scientists

Mercy Mascreen Davidson. *B.S., Madras (India), 1968; M.S., 1970; Ph.D., 1979*
Sara Shanske. *B.A., California (Los Angeles), 1967; Ph.D., Albert Einstein, 1977*
Armin Stelzer. *M.D., Ph.D., Hamburg (Germany), 1982*

LECTURER

Robert E. McMasters, M.D.

ASSOCIATES IN CLINICAL NEUROLOGY

Claudia Chiriboga-Klein, M.D.
Sidney M. Cohen, M.D.
Stephen Carl Klass, M.D.
Stanley Lesse, M.D.
Glenn M. Seliger, M.D.
Heidi Shale, M.D.
Robert Wolff, M.D.

INSTRUCTORS IN CLINICAL NEUROLOGY

Damon N. Fellman, M.D.
Gerald J. Smallberg, M.D.

INSTRUCTOR IN PHYSICAL THERAPY

Christine W. Wade, M.A.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Lewis L. Hamilton. *B.S., Yale, 1960; M.D., Columbia, 1964*

Assistant Clinical Professors

Paul M. Deringer. *B.A., Columbia, 1971; M.D., 1975*
Mary Ann Whelan. *B.A., Radcliffe, 1961; M.A., Harvard, 1969; Ph.D., 1972; M.D., Dartmouth, 1976*

At Harlem Hospital Center

Professor of Clinical Neurology

John C. M. Brust, Jr. *B.A., Harvard, 1958; M.D., Columbia, 1962*

Associate Clinical Professor

Alfred C. Bannerman. *B.Sc., Edinburgh, 1963; M.B.,Ch.B., 1966*

Assistant Clinical Professors

Bertel Bruun. *M.D., Copenhagen, 1964*
Renee Malouf. *B.A., Hunter, 1956; M.D., State University of New York (Downstate), 1960*

ASSOCIATE IN CLINICAL NEUROLOGY

Bruce Roseman, M.D.

INSTRUCTOR IN CLINICAL NEUROLOGY

Rafael Borras, M.D.

At St. Luke's-Roosevelt Hospital Center

Clinical Professor

Carl W. Braun. *B.A., Harvard, 1958; M.D., Pennsylvania, 1962*

Associate Clinical Professor

Sidney E. Bender. *M.D., Toronto, 1962*

Assistant Clinical Professor

Neil Lombardi (also Pediatrics). *B.A., M.D., Boston, 1967*

ASSOCIATE IN CLINICAL NEUROLOGY

Maureen S. Cafferty, M.D.

INSTRUCTOR IN CLINICAL NEUROLOGY

Daniel Alkaitis, M.D.

Obstetrics and Gynecology

Willard C. Rappleye Professor and Chairman

Mortimer Rosen. *B.S., New York University, 1951; M.D., 1955*

At Presbyterian Hospital

Professors

Mieczyslaw Finster (also Anesthesiology). *B.A., Gymnasium (Poland), 1941; M.D., Geneva, 1957*
Georgiana Jagiello (Virgil G. Damon Professor) (also Genetics) (in the Center for Reproductive Sciences). *B.A., Boston, 1949; M.D., Tufts, 1955*
L. Stanley James (also Pediatrics). *M.D., Otago (New Zealand), 1948*
Allan G. Rosenfield (also Public Health) (in the Center for Population & Family Health). *B.A., Harvard, 1955; M.D., Columbia, 1959*

Professor of Anesthesiology

Hisayo Morishima. *M.D., Toho (Tokyo), 1951; Ph.D., 1960*

Professor of Physiology & Cellular Biophysics

Michel Ferin (in the Center for Reproductive Sciences). *M.D., Louvain, 1964*

Professors of Clinical Obstetrics & Gynecology

Edward T. Bowe. *B.S., Columbia, 1957; M.D., 1961*
Harold E. Fox (also Pediatrics). *M.Sc., Rochester and Oxford, 1972; M.D., Rochester, 1972*
Ilan E. Timor. *M.D., Hebrew (Israel), 1963*

Clinical Professors

Richard U. Levine. *B.S., Tufts, 1962; M.D., Cornell, 1966*
Raymond M. McCaffrey. *B.A., Fordham, 1954; M.D., Cornell, 1958*
Wolfgang Tretter. *M.D., Heidelberg, 1952*
Ming Yeh. *M.D., National Taiwan, 1964*

Associate Professor of Pathology

Umadevi Tantravahi. B.S, Andhra, 1959; *M.S., 1961; M. Phil. Columbia, 1978; Ph.D., 1980*

Associate Professors of Clinical Obstetrics & Gynecology

Bruce A. Barron. *B.A., Allegheny, 1955; Ph.D., Yale, 1965; M.D., New York University, 1971*
Laxmi Baxi. *M.D., Seth G.S. Medical College (Bombay), 1962*
Wylie C. Hembree, III (also Medicine). *B.A., Vanderbilt, 1960; M.D., Washington (St. Louis), 1964*
Raphael Jewelewicz. *M.D., Hebrew (Jerusalem), 1960*

Associate Clinical Professors

Vincent J. Freda. *B.A., Columbia, 1948; M.D., New York University, 1952*
Ralph J. Hessekiel. *B.S., Queens, 1950; M.D., State University of New York (Downstate), 1954*

Assistant Professors

Stephen A. Brown. *B.A., Chicago, 1980; M.D., 1984*
Conrad R. Chao. *B.A., Wesleyan, 1978; M.D., 1982*
Jye-Siung Fang. *B.S., National University of Taiwan, 1962;Ph.D., Kansas State, 1971*
Frederick A. Gonzalez. *B.S., Boston, 1972; M.D., Columbia, 1976*
Amalia C. Kelly. *B.A., Bard, 1975; M.D., Tufts, 1979*
David B. Peisner. *B.S., California Institute of Technology, 1974; M.D., Wayne State, 1978*
Mary L. Reuss (in the Sergievsky Center). *B.S., Pennsylvania, 1973; M.D., Thomas Jefferson, 1978*
Christina Ruegsegger Veit. *B.S., Simmons, 1975; M.D., Munich, 1981*
Wendy Warren. *B.A., Wellesley, 1978; M.D., Cornell, 1982*
Carolyn L. Westhoff. *B.S., Michigan, 1972; M.D., 1977*

Assistant Professor of Biochemistry & Molecular Biophysics

Richard K. Assoian (in the Center for Reproductive Sciences). *B.A., Johns Hopkins, 1975; Ph.D., Chicago, 1981*

Assistant Professors of Clinical Obstetrics & Gynecology

Jody S. Blanco. *B.S., Cornell, 1977; M.D., State University of New York (Upstate), 1981*
Nabil Wafik Husami. *B.S., M.D., American University of Beirut, 1972*
Hilda Yvonne Hutcherson. *B.A., Stanford, 1976; M.D., Harvard, 1980*
John P. Koulos. *B.S., Northwestern, 1974; M.D., 1978*
Andrew Loucopoulos. *M.D., Athens, 1970*
Frances Marks. *B.S., Fairleigh Dickinson, 1978; M.D., Columbia, 1982*
Kevin B. Reilly. *B.S., Fairfield (Connecticut), 1966; M.D., Michigan, 1970*
Meredith F. Sirmans. *B.A., Lincoln, 1961; M.D., Meharry, 1965*
Daniel H. Smith. *M.D., Harvard, 1972*

Assistant Clinical Professors

Fred A. Avila. *M.D., Santo Domingo, 1969*
Valerie Burke. *B.A., Barnard, 1977; M.D., Mt. Sinai, 1981*
Frederick S. Clare. *B.A., McGill, 1968; M.B.,B.S., West Indies (Jamaica), 1973*
Maritza Cruz. *M.D., Harvard, 1983*
Eileen F. Demarco, B.A, Cornell, 1982; *M.D., New York University, 1986*
Coleman Henley, Jr. *B.A., State University of New York (Buffalo), 1966; M.D., Howard, 1970*
Claudia Holland. *B.A., Harvard, 1977; M.D., Mt. Sinai, 1981*
Sarah H. Kelly. *B.A., Miami, 1970; M.A., Indiana, 1971; M.S., M.D., 1978*

Anita Parnes La Sala. *B.A., Radcliffe, 1976; M.D., Columbia, 1980*
Jodi P. Lerner. *B.A., Lehigh, 1982; M.D., Pennsylvania, 1986*
Steven H. Lewis (also Pathology). *B.A., Boulder, 1977; M.D., 1981*
Juan S. Lopez. *B.S., Ulises Espaillat College (Dominican Republic), 1954; M.D., Autonomous (Santo Domingo), 1962*
Ana Monteagudo. *B.S., City University of New York, 1978; M.D., Albert Einstein, 1982*
Paula A. Randolph. *B.S., Howard, (Cambridge), 1979; M.D., Columbia, 1983*
Lauri J. Romanzi. *M.D., Eastern Virginia, 1984*
Rafael A. Tejeda. *B.S., Santo Domingo, 1955; M.D., 1962*
Jose F. Torres. *B.S., Lyceum, Jose Joaquin Perez (Santo Domingo), 1945; M.D., Santo Domingo, 1951*

Associate Research Scientists

Weng Kong Sung. *B.S., Pin Ton Institute, 1963; Ph.D., Hokkaido, 1975*
Axel G. Wadewitz. *B.S., St. Johns, 1980; Ph.D., 1987*

SPECIAL LECTURERS

Henry Clay Frick, II, M.D.
Seymour Lieberman, Ph.D.
David B. Moore, M.D.
Equinn Munnell, M.D.

LECTURERS

Arnold N. Fenton, M.D.
Marvin T. Grody, M.D.

INSTRUCTORS IN CLINICAL OBSTETRICS & GYNECOLOGY

Janis Enzenbacher, M.D.
Unjeria C. Jackson, M.D.
Leonardo J. Yunis, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professors

Douglas H. Barns. *B.S., St. Lawrence, 1950; M.D., Cornell, 1954*
Mark Elliott Heller. *B.A., Lehigh, 1969; M.D., State University of New York (Buffalo), 1973*
Balazs Selendy. *M.D., Louvain (Belgium), 1964*

At Harlem Hospital

Professor of Clinical Obstetrics & Gynecology

Sterling B. Williams. *M.S., Northern Illinois, 1966; M.D., Arkansas, 1973*

Associate Professor of Clinical Obstetrics & Gynecology

Hiroko T. Felton. *M.D., Kansai (Japan), 1955*

Associate Clinical Professor

Stephen L. Matseoane. *B.S., Fort Hare (South Africa), 1954; M.D. Witwatersrand (South Africa), 1959*

Assistant Professors of Clinical Obstetrics & Gynecology

Sunthorn Bunyaviroch. *B.S., Chulalongkorn (Thailand), 1960; M.D., Siriraj, 1964*
Young Sook Cho. *M.B., Yonsei, 1955; M.D., 1959*
Nomenida A. Lazaro. *B.S., Santo Tomas (Philippines), 1960; M.D., 1965*
Janet L. Mitchell, *A.B., Mt. Holyoke, 1972; M.D., Howard, 1976; M.P.H., Harvard, 1987*
Esther Suarez. *A.A., Santo Tomas (Philippines), 1955; M.D., 1960*
Alfred J. Williams. *B.A., Howard, 1960; M.D., Meharry, 1964*

Assistant Clinical Professors

Kok Chung Chang. *M.D., National (Taiwan), 1973*
Hasi Das. *M.B.,B.S., Calcutta (India), 1964*
Trishit Mukharjee. *M.B.,B.S., Calcutta, 1956; M.D., 1962*
Istvan P. Tornai. *M.D., Medical Sciences University (Hungary), 1955*
Pisan Unchalipongse. *M.D., Chiengma Medical School (Thailand), 1965*

INSTRUCTORS IN CLINICAL OBSTETRICS & GYNECOLOGY

Aydin M. Arici, M.D.
Diane M. Ashton, M.D.
Kwadwo Boakye, M.D.
Gina M. Brown, M.D.
Karlene Chin Quee, M.D.
Sitaram Vithal Chitnis, M.D.
Iris Huggins, M.D.
Barbara Lanzara, M.D.
Ashalatha Mital, M.B.B.S.
Thomas Murray, M.D.
Rajasingham Rahulatharan, M.D.
Spencer I. Ross,M.D.
Sandra Alexis Semple, M.D.
Barbara C. Toppin, M.D.
Violeta Valdez, M.D.
Deborah White, M.D.

At Morristown Memorial Hospital

Associate Professor of Clinical Obstetrics & Gynecology

Abraham Risk. *M.D., Dalhousie 1957; M.P.H., Johns Hopkins, 1969*

At St. Luke's-Roosevelt Hospital Center

Professor

Robert S. Neuwirth (Dorothy B. Babcock Professor). *B.S., Yale, 1955; M.D., 1958*

Associate Professor of Clinical Obstetrics & Gynecology

Michelle P. Warren (also Medicine). *B.A., Mount Holyoke, 1961; M.D., Cornell, 1965*

Associate Clinical Professor

Haider Hussein Shamsi. *M.B.,B.S., King Edward Medical College (Pakistan), 1965*

Assistant Professors

Amos Grunebaum. *M.D., Cologne, 1975*
Maureen Killackey. *B.A., Barnard, 1974; M.D., Cornell, 1978*

Assistant Professor of Clinical Obstetrics & Gynecology

Terusada Horiguchi. *M.D., Keio (Tokyo), 1961*

Assistant Clinical Professors

David B. Crawford. *B.S., North Carolina, 1943; M.D., New York University, 1946*
Ivan J. Jacobson. *B.A., Belgrade (Yugoslavia), 1948; M.D., 1955*
Gyula Nemes. *B.A., Gymnasium Szekesfehervar, 1946; M.D., Budapest, 1954*
Marcia L. Storch. *B.A., Bryn Mawr, 1955; M.D., Woman's Medical College of Pennyslvania, 1973*
Ian G. Van Praagh. *M.D., Toronto, 1955*
Riley W. Waller. *B.S., LeMoyne, 1943; M.D., Howard, 1947*

LECTURERS

Naif K. Basile, M.D.
Charles H. Debrovner, M.D.
Richard A. Ruskin, M.D.
Fouad Surur, M.B.,Ch.B.

ASSOCIATES IN CLINICAL OBSTETRICS & GYNECOLOGY

Dov B.S. Goldstein, M.D.
Bernardo Handszer, M.D.

INSTRUCTORS IN CLINICAL OBSTETRICS & GYNECOLOGY

Nargess Ahgharian, M.D.
Terry L. Andrews, M.D.
Howard Balick, M.D.
Ronald D. Blatt, M.D.
Felipe Bozzo, M.D.
Satwant Kaur Dhamoon, M.R.C.O.G.
Paul Filipescu, M.D.
Susan L. Grant, M.D.
Amtul R. Hussein, M.D.
Joseph Iwanicki, M.D.
Juanita Jenyon, M.D.
Jay Joel Kelinson, M.D.
Lawrence D. Kramer, M.D.
Olivia Lermand, M.D.
Leon Lewenstein, M.D.
Ellen Manos, M.D.
Karlheinz Moehlen, M.D.
Robin L. Molsberry, M.D.
Alan Morris, M.D.
Lillian D. Nash, M.D.
Diana Oquendo, M.D.
Benu Pascariu, M.D.
Jane M. Ponterio, M.D.
Vicar Qureshi, M.D.
George S. Radney, M.D.
Jaana V. Rehnstrom-Blanc, M.D.
Ronald J. Reiss, M.D.
Irving Ward Robinson, M.D.
Arnold Roufa, M.D.
Peter S. Sailon, M.D.
Malca Sane, M.D.
Claudia A. Useda, M.D.
Alvin C. Wesley, M.D.
Mary E. Wilson, M.D

Ophthalmology

Edward S. Harkness Professor and Acting Chairman

Anthony Donn. *B.S., Yale, 1947; M.D., Columbia, 1952*

At Presbyterian Hospital

Professor

Peter Gouras. *B.A., Johns Hopkins, 1951; M.D., 1955*

Professor of Ocular Physiology

Laszlo Z. Bito. *B.A., Bard, 1959; Ph.D., Columbia, 1963*

Professor of Ophthalmic Biochemistry

Abraham Spector. *Ph.D., New York University, 1957*

Professor of Physiology & Cellular Biophysics

Jorge Fischbarg. *M.D., Buenos Aires, 1962; Ph.D., Chicago, 1971*

Professor of Radiation Biology

Basil V. Worgul. *B.S., Miami, 1969; Ph.D., Vermont, 1974*

Professors of Clinical Ophthalmology

Myles M. Behrens. *B.A., Yale, 1958; M.D., Columbia, 1962*
R. Linsy Farris. *M.D., Duke, 1961*
Max Forbes. *B.A., Cornell, 1951; M.D., Chicago, 1957*
Francis A. L'Esperance, Jr. *B.A., Dartmouth, 1952; M.D., Harvard, 1956*
Harold F. Spalter. *B.A., Brown, 1951; M.D., Columbia, 1955*
B. Dobli Srinivasan. *Ph.D., Columbia, 1964; M.D., 1967*
Stephen Trokel. *B.A., Cornell, 1954; M.S., Rochester, 1956; M.D., 1959; Med. Sc.D., Columbia, 1965*

Associate Professor

Hermann D. Schubert (also Pathology). *M.D., Dusseldorf (West Germany), 1974*

Associate Professor of Biophysical Ophthalmology

Charles J. Koester. *B.S., Carnegie Institute of Technology, 1950; Ph.D., Rochester, 1955*

Associate Professors of Clinical Ophthalmology

Richard W. Darrell. *B.A., Harvard, 1955; M.D., 1959; Sc.D., Columbia, 1965*
Andrew de Roetth, Jr. *B.S., Northwestern, 1943; M.D., 1946*
Sally Moore (Orthoptics). *B.S., Delaware, 1952; Orthoptics Certificate, 1965*
Lawrence Yannuzzi. *B.A., Harvard, 1959; M.D., Boston, 1964*

Associate Clinical Professors

Brian J. Curtin. *B.S., Fordham, 1942; M.D., New York University, 1945*
Jack M. Dodick. *M.D., Toronto, 1963*
John W. Espy. *B.S., Franklin and Marshall, 1953; M.D., Cornell, 1956*
Frank B. Hoefle. *B.A., Dartmouth, 1957; M.D., Harvard, 1961*
Albert Hofeldt. *B.S., Portland State, 1965; M.D., Oregon, 1969*
George M. Howard. *B.A., Dartmouth, 1952; M.D., State University of New York (Albany), 1959*
R. David Sudarsky. *B.S., Yale, 1946; M.D., 1949*
Arnold I. Turtz. *M.D., New York University, 1948*

Research Scientist

James P. Dillon. *B.S., Canisious, 1964; M.S., Columbia, 1973; Ph.D., 1974*

Assistant Professors

Raul Oscar Chiesa. *B.S., Instituto Alberto Brause (Uruguay), 1971; M.D., Universidad de las Republica (Uruguay), 1980*
Peter H. Frederikse. *B.S., Washington (Seattle), 1978; Ph.D., Maryland, 1984*
Larry Liebovitch. *B.S., City College of New York, 1972; M.A., Harvard, 1973; Ph.D., 1978*

Assistant Professors of Clinical Ophthalmology

Howard M. Eggers. *B.A., Columbia, 1967; M.D., 1971*
Emil Wirostko. *B.S., Fordham, 1956; M.D., Cornell, 1960; Sc.D., Columbia, 1967*

Assistant Clinical Professors

Yale L. Fisher. *B.A., Cornell, 1964; M.D., 1967*
William James, Jr. *B.A., Princeton, 1960; M.D., Columbia, 1965*
Martin E. Lederman. *B.A., Brooklyn, 1960; M.D., Albert Einstein, 1964*
Martin L. Leib. *B.S., Yeshiva, 1969; M.D., New York Medical College, 1974*
Robert Lopez. *B.A.,B.S., California (Irvine), 1978; M.D., Harvard, 1982*
Merlin D. Marquardt. *M.D., Wisconsin, 1971*
John Carlson Merriam. *A.B., Harvard, 1971; M.D., 1977*
Rainer N. Mittl. *M.D., Munich, 1964*
Hugh M. Moss. *B.A., Harvard, 1952; M.D., Pennsylvania, 1954*
Louis D. Pizzarello (also Public Health). *B.A., Colgate, 1971; M.P.H., Harvard, 1974; M.D., Virginia, 1975*

Associate Research Scientists

Shonit R. Das. *M.S., Assam (India), 1974; Ph.D., 1980*
Dean E. Hart. *B.S., New York Institute of Technology, 1981; M.A., Hofstra, 1983; O.D., State University of New York, 1987*
Norman J. Kleinman. *B.S., Resselear Polytechnics Institute, 1979; M.S., Vanderbilt, 1982; Ph.D., 1985*
Jan Koniarek. *B.S., Manhattan College, 1971*
Lu-ku Li. *B.S., National University of Taiwan, 1958; Ph.D., Princeton, 1964*
Cecily Medvedovsky. *M.D., Tashkent Medical Institute, 1942; Ph.D., Institute for Industrial Hygiene and Occupational Diseases, 1964*

SPECIAL LECTURERS

Frank D. Carroll M.D.
Ira S. Jones, M.D.
Philip Knapp, M.D.
Wladyslaw Manski, D.S.
George R. Merriam, M.D.
Karl Meyer, M.D.

LECTURER

Gerald Weinstein, M.D.

ASSOCIATES IN CLINICAL OPHTHALMOLOGY

Richard D. Banyard, M.D.
Lisa G. Barbera, M.D.
Arthur M. Cotliar, M.D.
Pamela Frances Gallin, M.D.

ASSOCIATES *(continued)*

Donald H. Green, M.D.
Cynthia J. Mackay, M.D.
Jeffrey G. Odel, M.D.
Lawrence G. Pape, M.D.
Jaime Santamaria, III, M.D.
R. Theodore Smith, M.D.
Dean E. Stetz, M.D.
Michael J. Weiss, M.D.

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY

James D. Auran, M.D.
Daniel S. Casper, M.D., Ph.D.
Stephen Doro, M.D.
George J. Florakis, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professor

Charles B. Deichman. *B.A., Massachusetts, 1963; M.D., State University of New York (Albany), 1969*

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY

Paul M. Beer, M.D.
Irene H. Ludwig, M.D.

At Harlem Hospital

Assistant Professor of Clinical Ophthalmology

Herman C. Jordan. *B.A., Colgate, 1954; M.D., Howard, 1964*

ASSOCIATES IN CLINICAL OPHTHALMOLOGY

Rajendra K. Bansal, M.D.
Antonio M. Gonzales, M.D.
John P. Mitchell, M.D.
Ram P. Tiwari, M.S.

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY

Milton Delerme, M.D.
Frantz Lerebours, M.D.
Cambiz T. Moazed, M.D.
Christopher A. Rice, M.D.

At St. Luke's-Roosevelt Hospital Center

Associate Clinical Professor

James C. Newton. *B.S., Fordham, 1949; Ph.D., 1953; M.D., Jefferson, 1957*

Assistant Clinical Professor

Chin Wing Chu, *B.A., Yale, 1968; M.D., State University of New York (Downstate), 1972*

LECTURER

Dennis Freilich, M.D.

ASSOCIATES IN CLINICAL OPHTHALMOLOGY

Alan Charles Brown, M.D.
John Eden, M.D.
Charles Merker, M.D.

INSTRUCTORS IN CLINICAL OPHTHALMOLOGY

Louis V. Angioletti, Jr., M.D.
Ulises Arango, M.D.
Robert C. Del la Rocca, M.D.
Bernard J. Fowler, M.D.
Bruce M. Hyman, M.D.
Richard D. Lester, M.D.
Kenneth E. Merhige, M.D.
Thomas O. Muldoon, M.D.
Robert P. Newhouse, M.D.
Satya D. Paul, M.D.
Rochelle L. Peck, M.D.
Steven M. Plotycia, M.D.
Chalermpong Sarakhun, M.D.
Celeste Schmucker-Karpow, M.D.
John R. Stabile, M.D.
Richard T. Sturm, M.D.
George Traykovski, M.D.
Howard K. Weisberg, M.D

Orthopedic Surgery

Frank E. Stinchfield Professor and Chairman

Harold M. Dick, *B.A., Princeton, 1956; M.D., New York University, 1960*

At Presbyterian Hospital

Professors of Mechanical Engineering and Orthopedic Bioengineering

Michael W. Lai. *B.S., National Taiwan University, 1953; M.S., Michigan, 1959; Ph.D., 1962*
Van C. Mow. *B.A.E., Resselaer Polytechnic Institute, 1962; Ph.D., 1966*

Professors of Clinical Orthopedic Surgery

Nas Ser Eftekhar. *M.D., Teheran, 1960*
S. Ashby Grantham. *B.A., Washington (St. Louis), 1952; M.D., 1955*

Clinical Professor

Norman A. Hill. *A.B., Princeton, 1949; M.D., Columbia, 1953*

Associate Professor of Orthopedic Biochemistry

Anthony Ratcliffe. *B.S., Birmingham (England), 1977; Ph.D., 1980*

Associate Professors of Clinical Orthopedic Surgery

Hugo A. Keim. *B.S., St. Mary's (Minnesota), 1956; M.D., Loyola, 1960; M.S., Northwestern, 1966*
Christopher B. Michelsen, *B.A., Bowdoin, 1961; M.D., Columbia, 1969*

Associate Clinical Professors

David L. Andrews. *B.A., Williams, 1952; M.D., Columbia, 1956*
Jean-Pierre C. Farcy. *M.D., Aix-Marseille, 1972*

Assistant Professors

Louis U. Bigliani. *B.A., Holy Cross, 1968; M.D., Loyola, 1972*
Eric C. Carlson. B.M., Texas 1972; *B.S., Southern Mississippi, 1977; M.D., Mississippi, 1981*
Gail S. Chorney. *B.A., Smith, 1974; M.D., Boston,1978*
Evan L. Flatow. *B.A., Princeton, 1977; M.D., Columbia, 1981*
Michael Aloysius Kelly. *B.A., North Carolina, 1974; M.D., Georgetown, 1979*
Stephen J. McIlveen. *B.S., Fairleigh Dickinson, 1969; M.D., New York University, 1973*
Peter D. McCann. *B.A., Columbia, 1975; M.D., 1980*
Ohannes A. Nercessian. *B.S., Lehman, 1977; M.D., Columbia, 1981*
Donna P. Phillips. *B.A., Texas, 1976; M.D., Baylor, 1981*
Melvin P. Rosenwasser. *B.A., Johns Hopkins, 1972; M.D., Columbia, 1976*
David Price Roye, Jr. *B.A., Oklahoma, 1971; M.D., Columbia, 1975*

Adjunct Assistant Professor

Stuart J. Hershon. *A.B., Harvard, 1959; M.D., New York Medical College, 1963*

Assistant Professors of Clinical Orthopedic Surgery

Ronald P. Grelsamer. *B.S.,B.A., Brown, 1975; M.D., Columbia, 1979*
Armen C. Haig. *B.A., Columbia, 1952; M.D., Yale, 1965*
Howard A. Kiernan, Jr. *B.S., Holy Cross, 1962; M.D., New York University, 1966*
Bruce L. Sprague. *B.A., Princeton, 1960; M.D., Pennsylvania, 1964*

Assistant Clinical Professors

Peter Carbonara. *B.A., Columbia, 1953; M.D., Boston, 1957*
Robert N. Dunn. *B.A., Harvard, 1965; M.D., Columbia, 1969*
Merle H. Katzman. *B.S., Trinity (Connecticut), 1950; M.D., Jefferson, 1954*
Harvey Orlin. *M.D., State University of New York (Downstate), 1961*
Walter J. Pedowitz. *B.A., Lafayette, 1966; M.D., State University of New York (Downstate), 1971*
Robert M. Reiss. *B.A., Columbia, 1951; M.D., 1959*
Thomas Rodda. *B.A., King's College (Pennsylvania), 1957; M.D., Loyola, 1961*
Joseph E. Salvatore. *M.D., Hahneman, 1955; M.S., Tennessee, 1962*
Mark Schottenfeld. *B.A., Hobart, 1963; M.D., Chicago, 1967*
E. Baldwin Self, Jr. *B.A., Yale, 1932; M.D., Columbia, 1936*
Martin L. Sorger. *B.A., Hamilton, 1956; M.D., Columbia, 1960*
Ronald Tietjen. *B.S., Ursinus (Pennsylvania), 1968; M.D., New York University, 1972*
Luther F. Warren. *B.A., Harvard, 1961; M.D., Columbia, 1968*
Joel D. Weinstein. *B.A., Princeton, 1958; M.D., Columbia, 1962*

Associate Research Scientists

Robert James Foster. *B.A., Cooper Union, 1973; M.E., Columbia, 1974; Sc.D., 1982*
Robert J. Pawluk. *B.S., Columbia, 1974; M.B.A., 1977*
Wenbo Zhu. *B.S., Shanghai Science & Technology, 1982; M.S., Taiwan Polytechnic Institute, 1984*

SPECIAL LECTURERS

Austin D. Johnston, M.D.
Charles S. Neer II, M.D.
Frank E. Stinchfield, M.D.
D. Keith McElroy, M.D.

LECTURERS

Allan M. Levy, M.D.
Robert J. Pawluk, M.B.A.

INSTRUCTOR

Scott V. Haig, M.D.

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY

Phillip A. Bauman, M.D.
Steven Berkowitz, M.D.
Michael J. Bronson, M.D.
Robert M. Esposito, M.D.
Stuart J. Fischer, M.D.
Richard E. Fleming, Jr., M.D.
Craig Richard Foster, M.D.
Charles B. Goodwin, M.D.
James S. Kort, M.D.
Lawrence A. Lefkowitz, M.D.
John J. Leppard III, M.D.
Marc I. Malberg, M.D.
Seth R. Miller, M.D.
Thomas A. Rago, M.D.
Wendell O. Scott, M.D.
Hervey S. Sicherman, M.D.
William T. Stillwell, M.D.
Francis F. Tarsney, M.D.
Marvin Winell, M.D.

At Mary Imogene Bassett Hospital

Assistant Clinical Professor

Franklin Lynch, Jr. *B.A., Dartmouth, 1972; M.D., 1975*

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY

Charles A. Mick, M.D.
Michael Ries, M.D.

At Harlem Hospital Center

Associate Professor of Clinical Orthopedic Surgery

Marvin L. Shelton. *B.S., Howard, 1951; M.D., 1956*

Assistant Professors of Clinical Orthopedic Surgery

Reginald E. Manning. *B.A., Columbia, 1974; M.D., 1978*
Shearwood J. McClelland. *B.A., Princeton, 1969; M.D., Columbia, 1974*

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY

Jacquelin Emmanuel, M.D.
Caleb F. Medley, M.D.

At Helen Hayes Hospital

Professor of Clinical Orthopedic Surgery

George Van B. Cochran. *B.A., Dartmouth, 1953; M.D., Columbia, 1956; Med.Sc.D., 1957*

Associate Clinical Professor

Raphael K. Levine. *B.A., Brandeis, 1961; M.D., Jefferson, 1965*

Assistant Professor

Mark Weidenbaum. *B.S., Connecticut, 1977; M.D., Columbia, 1981*

Associate Research Scientists

Martin W. Ferguson-Pell. *B.S., Exeter (United Kingdom), 1973; Ph.D., Strathclyde (Glasgow), 1977*
Murali P. Kadaba. *M.S., Cincinnati, 1972; Ph.D., Kentucky, 1978*

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY

John W. Carmody, M.D.
William L. King, Jr., M.D.
Ralph N. Purcell, M.D.

At St. Luke's-Roosevelt Hospital Center

Professor of Clinical Orthopedic Surgery

Joseph W. Fielding. *M.D., Toronto, 1946*

Clinical Professor

Robert E. Zickel. *B.A., Cornell, 1952; M.D., 1958*

Assistant Clinical Professors

Vincent J. Fietti, Jr. *B.A., Boston, 1968; M.D., 1972*
William G. Hamilton. *B.S., Princeton, 1954; M.D., Columbia, 1964*
Frederic E. Helbig. *B.A., Brown, 1964; M.D., Boston, 1969*
Paul Hobeika. *B.S., Christian Brothers (Lebanon), 1968; M.D., French Faculty, 1975*
Tarek Hisham Mardam-Bey. *M.D., American University of Beirut, 1972*

Ronald M. Match. *B.A., Hofstra, 1953; M.D., Jefferson, 1957*
James C. Parkes, II. *B.A., Dartmouth, 1957; M.D., Harvard, 1961*
Andrew H. Patterson. *B.A., North Carolina, 1954; M.D., Columbia, 1958*
Francesca Thompson. *B.A., Smith College, 1965; M.S.W., Fordham, 1968; M.D., Cornell, 1977*
George L. Unis. *B.A., New York University, 1960; M.D., College of Medicine and Dentistry of New Jersey, 1975*

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY

Richard J. Cea, M.D.
Sanford A. Ratzan, M.D.

Otolaryngology

Professor and Chairman

Maxwell Abramson. *B.A., Wesleyan, 1957; M.D., Union (Albany), 1961*

At Presbyterian Hospital

Professor of Auditory Biophysics

Shyyam K. Khanna. *B.Sc., Lucknow (India), 1951; D.R.E., St. Xaviers (Bombay), 1951*

Professors of Clinical Otolaryngology

Andrew Blitzer (also Dental & Oral Surgery). *B.A., Adelphi, 1966; D.D.S., Columbia, 1970; M.D., Mt. Sinai, 1973*
Cheng Chun Huang. *B.S., Taiwan, 1963; M.S., Vanderbilt, 1966; Ph.D., Iowa, 1970*
Robert M. Hui. *B.A., Southern California, 1943; M.D., 1946*

Professor of Clinical Audiology and Speech Pathology

Thomas H. Fay. *B.A., Florida, 1949; M.A., Columbia, 1950; Ph.D., Illinois, 1958*

Clinical Professors

Lawrence Savetsky. *B.A., New York University, 1951; M.D., State University of New York (Downstate), 1955*
Malcolm H. Schvey. *B.A., Lehigh, 1947; M.A., Columbia, 1950; M.D., Amsterdam, 1956*
Howard W. Smith. D.*M.D., Tufts, 1945; Ph.D., Yale, 1948; M.D., 1953*

Associate Professor of Clinical Otolaryngology

Jack Joseph Wazen. *B.S., American University of Beirut, 1974; M.D., 1978*

Associate Professor of Clinical Dental & Oral Surgery

Steven M. Roser (in Surgery). *B.A., Middlebury, 1964; D.M.D., Harvard, 1968; M.D. 1972*

Associate Clinical Professor of Dental & Oral Surgery

John D. Piro (Prosthetics). *B.A., Fordham, 1943; D.D.S., Columbia, 1946*

Associate Clinical Professor

Raymond B. Strauss. *B.A., Washington (St. Louis), 1950; Ph.D., Florida, 1956; M.D., Case Western Reserve, 1968*

Assistant Professors

Monte S. Keen. *B.A., State University of New York (Binghamton), 1976; M.D., California (San Francisco), 1981*
Hector P. Rodriguez. *M.D., Autonomous (Guadalajara), 1980*

Assistant Professor of Clinical Otolaryngology

Lee David Eisenberg. *B.S., St. John's (New York), 1967; M.D., State University of New York (Downstate), 1971*

Assistant Clinical Professors

Anthony Paul Caruso. *B.S., Dickinson, 1971; M.D., Jefferson, 1975*
Vincent G. Caruso. *B.S., Dickinson, 1963; M.D., Jefferson, 1967*
Hyun T. Cho. *M.D., Korea, 1964*
Daniel J. Pender. *B.S., Worcester Polytechnic Institute, 1963; M.S., Yale, 1964; M.D., Pennsylvania, 1969*

Associate Research Scientists

James P. Kelly (also Anatomy & Cell Biology). *B.A., Harpur, 1966; M.D., Washington (St. Louis), 1971*
Mats L. Ulfendahl. B.M., *Karolinska Institute, 1983; Ph.D., 1989*

Adjunct Associate Research Scientists

Jonathan B. Allen. *Ph.D., Pennsylvania, 1970*
Barbara Canlon. *B.S., Brooklyn, 1980; M.S., Michigan, 1984; Ph.D., Karolinska Institute, 1988*

SPECIAL LECTURER

Robin M. Rankow, M.D.

INSTRUCTORS IN CLINICAL OTOLARYNGOLOGY

Carol L. Mackersie, M.A.
Robert L. Russo, M.D.

At Mary Imogene Bassett Hospital

INSTRUCTOR IN CLINICAL OTOLARYNGOLOGY

Paul D. Nosal, M.D.

At Harlem Hospital Center

Associate Clinical Professor

Errol A. Thompson. *M.B., University College (Dublin), 1936*

Assistant Clinical Professor

Ransford C. Newman. *M.B.,B.S., London, 1960*

INSTRUCTOR IN CLINICAL OTOLARYNGOLOGY

Ellsworth Frye, M.D.

At St. Luke's-Roosevelt Hospital Center

Associate Clinical Professors

George P. Katsantonis. *M.D., National University of Athens (Greece), 1971*
John S. Lewis. *M.D., Alberta (Canada), 1953*

Assistant Professor of Clinical Otolaryngology

Steven J. Pearlman. *B.A., Brandeis, 1978; M.D., Mt. Sinai, 1982*

Assistant Clinical Professors

Jacques A. Herzog. *B.A., Missouri, 1980; M.D., 1984*
Alan Jacobson. *M.D., Albert Einstein, 1978*
Tay Bong Lee. *M.D., Seoul National University, 1962*
Barry N. Rosenblum. *B.S., Missouri, 1976; M.D., 1980*
Walter H. Stingle. *B.A., Columbia, 1965; M.D., 1969*

INSTRUCTORS IN CLINICAL OTOLARYNGOLOGY

Marta Aramburu, M.D.
Neville W. Carmical, M.D.
James F. Grillo, M.D.
Edward M. Lane, M.D.
L. Nicole Moulin, M.D.
Dev Das Panigrahi, M.B., B.S.
Geoffrey J. Pollack, M.D.
Mauriciu Rodescu, M.D

Pathology

Francis E. Delafield Professor and Chairman

Michael M. Shelanski (in the Center for Neurobiology & Behavior). *M.D., Chicago, 1966; Ph.D., 1967*

At Presbyterian Hospital

Professors

Richard Axel (Eugene Higgins Professor) (also Biochemistry & Molecular Biophysics). *B.A., Columbia, 1967; M.D., Johns Hopkins, 1970*
Gabriel C. Godman (also Microbiology). *B.A., New York University, 1941; M.D., 1944*
Lloyd A. Greene (in the Center for Neurobiology & Behavior). *B.S., Chicago, 1965; Ph.D., California, 1970*
Daniel M. Knowles. *B.A., Bridgeport, 1969; M.D., Chicago, 1973*
Frederick R. Maxfield (also Physiology & Cellular Biophysics) (in the Center for Neurobiology & Behavior). *B.S., Union, 1971; Ph.D., Cornell, 1977*
Ralph M. Richart. *B.A., Johns Hopkins, 1954; M.D., Rochester, 1958*
Virginia Tennyson (also Anatomy & Cell Biology). *B.S., Pennsylvania State, 1946; M.S., Baylor, 1956; M.D., Columbia, 1960*

Professor of Surgical Pathology

Luciano Ozello. *M.D., Turin, 1951*

Adjunct Professors

S. Raymond Gambino. *B.S., Antioch, 1948; M.D., Rochester, 1952*
Robert V. Hutter. *B.A., State University of New York (Syracuse), 1950; M.D., 1954; M.A., Yale, 1958*
Harry L. Ioachim. *M.D., Bucharest (Rumania), 1949*
Sidney Pestka. *B.A., Princeton, 1957; M.D., Pennsylvania, 1961*

Professors of Clinical Pathology

Giuseppe A. Andres. *M.D., Pisa (Italy), 1949; Ph.D., 1965*
Carmia Borek (in Radiation Oncology). *M.S., George Washington, 1961; Ph.D., Wietzmann Institute (Israel), 1967*
Jay Lefkowitch. *B.A., Clark, 1972; M.D., Columbia, 1976*
Armand F. Miranda. *B.S., Columbia, 1969; M.D., 1973*
James M. Powers. *B.S., Manhattan, 1965; M.D., South Carolina, 1969*
Robert F. Reiss. *B.A., State University of New York (Syracuse), 1959; M.D., Bologna (Italy), 1965*
Nicole Suciu-Foca (in Surgery). *B.S., Bucharest (Rumania), 1959; M.D., 1960; Ph.D., 1965*

Professor of Clinical Comparative Pathology

Dennis F. Kohn (in the Institute of Comparative Medicine). *D.V.M., Ohio State, 1964; M.S., West Virginia, 1969; Ph.D., 1975*

Professor of Clinical Surgical Pathology

Karl Perzin. *B.A., Columbia, 1954; M.D., 1958*

Clinical Professors

Pablo Rubinstein. *M.D., Chile, 1962*
Sheldon C. Sommers. *M.D., Harvard, 1941*

Clinical Professor of Oral Pathology

Melvin N. Blake. *B.S., Massachussets, 1951; D.D.S., New York University, 1955*

Associate Professors

David R. Colman (also Anatomy & Cell Biology). *B.A., New York University, 1970; Ph.D., State University of New York (Downstate), 1977*
Riccardo Dalla-Favera. *M.D., Milan (Italy), 1976*
James E. Goldman (in Psychiatry). *B.A., Amherst, 1968; M.D., Ph.D., New York University, 1976*
Mary E. Hatten (in the Center for Neurobiology & Behavior). *B.A., Hollins, 1971; Ph.D., Princeton, 1975*
Ronald Liem (also Anatomy & Cell Biology) (in the Center for Neurobiology & Behavior). *B.A., Amherst, 1968; M.Sc., Cornell, 1969; Ph.D., 1973*
Carol A. Mason (also Anatomy & Cell Biology) (in the Center for Neurobiology & Behavior). *B.S., Chatham, 1967; M.A., California (Berkeley), 1969; Ph.D., 1973*
John F. Nicholson (also Pediatrics). *B.A., Vanderbilt, 1955; M.D., 1958*
Hermann D. Schubert (also Ophthalmology). *M.D., Dusseldorf (West Germany), 1974*
Umadevi Tantravahi (in Obstetrics & Gynecology). *B.S., Andhra, 1959; M.S., 1961; M. Phil., Columbia, 1978; Ph.D., 1980*

Associate Professor of Dental & Oral Surgery (Stomatology)

David Zegarelli. *B.A., Columbia, 1965; D.D.S., 1969*

Associate Professors of Neuropathology

Lester M. Geller. *B.A., Cornell, 1947; M.A., Michigan State, 1948; Ph.D., New York University, 1953*
Mavis Kaufman (in Psychiatry). *M.D., New York Medical College, 1944*

Adjunct Associate Professors

Majid Ali. *M.B., B.S., Punjab, 1963; F.R.C.S., Royal, (London), 1968*
Ernest Baden. *M.A. Sorbonne, 1946; D.D.S., New York University, 1950; M.D., Geneva, 1962*
Lewis Allen Johnson. *B.A., Minnesota, 1951; M.D., 1955*
Michael J. Lotz. *B.A., Columbia, 1968; M.D., 1972*
Ah-Kau Ng (in Surgery). *B.S., National Chung Hsing University (Taiwan), 1969; M.D., State University of New York (Plattsburgh), 1972; Ph.D., Temple, 1975*
M. Richard Pachter. *M.D., Zurich, 1956*
John A. Terzakis. *B.A., Columbia, 1957; M.D., New York University, 1961*
Kaity Yannopoulos. *M.D., Greece, 1954*
Frederick T. Zugibe. *B.S., St. Francis, 1951; M.S., Chicago, 1959; Ph.D., 1960*

Associate Professors of Clinical Pathology

Carole Louise Berger (also Dermatology). *B.S., City College of New York, 1966; M.A., Columbia, 1971; M.S., 1975; Ed.D., 1976; Ph.D., 1984*
Thomas A. Blumenfeld. *A.A., North Carolina, 1960; M.D., Tennessee, 1964*
Vivette Denise D'Agati. *B.A., Yale, 1975; M.D., New York University, 1979*
Reba M. Goodman. *B.A., Indiana, 1949; M.A., Columbia, 1953; Ph.D., 1956*
Ellen Greenebaum. *B.A., Barnard, 1973; M.D., Columbia, 1977*
Mary E. King. *B.A., Smith College, 1947; M.D., Columbia, 1951*
Charles C. Marboe. *B.A., Princeton, 1971; M.D., Pennsylvania State, 1976*
Kathleen Mary O'Toole. *B.S., Fordham, 1974; M.D., Albert Einstein, 1978*
Michael Pesce. *B.S., St. Johns, 1967; Ph.D., 1971*
Philip C. Ursell. *B.A., Haverford, 1972; M.D., Columbia, 1976*
H. Joachim Wigger. *M.D., Hamburg, 1954*
Barbara A. Winkler. *M.D., Columbia, 1978*

Associate Professors of Clinical Neuropathology

Richard Defendini. *B.A., Michigan, 1948; M.A., 1952; M.D., Rochester, 1961*
Arthur P. Hays. *B.A., Dartmouth, 1962; Med Sc.D., 1963; M.D., Colorado, 1966*

Associate Clinical Professors

Irwin A. Almenoff. *B.S., College of the City of New York, 1948; M.D., Cornell, 1952*
Daniel W. Benninghoff. *B.A., Yale, 1949; M.D., Columbia, 1953*
Daniel J. Fink. *B.S., Cornell, 1968; M.S., Massachusetts Institute of Technology, 1970; M.D., Columbia, 1975;M.Phil., 1980*
Ricardo Mesa-Tejada. *B.S., Manhattan, 1964; M.D., Madrid, 1970*
Artemis D. Nash. *B.A., Smith, 1949; M.D., Columbia, 1953*
David N. Silvers (also Dermatology). *B.A., Haverford, 1964; M.D., Duke, 1968*
Stanley Simbonis. *B.S., Yale, 1953; M.D., 1957*

Associate Clinical Professor of Neuropathology

Nicholas J. Willson (in Psychiatry). *B.S., St. Peter's, 1959; M.D., Seton Hall, 1963*

Assistant Professors

Amy Chadburn. *B.S., Oregon, 1979; M.D., Stanford, 1983*
Margaret Collins. *B.S., Fordham, 1972; M.D., Georgetown, 1977*

Andrew J. Dwork (in Psychiatry). *B.A., Columbia, 1973; M.D., College of Medicine and Dentistry of New Jersey, 1977*
Joseph Herbert (Irving Assistant Professor of Neurology) (Neuropathology). *B.S. Hebrew (Jerusalem), 1971; M.D., 1975*
John J. Krolewski. S.M.,S.B., Massachusetts Institute of Technology, 1977; *M.D.,Ph.D., New York University, 1984*
Eugene E. Marcantonio. *B.A., Rutgers, 1977; M.D., Ph.D., New York University, 1984*
Timothy E. McGraw. *B.A., Chicago, 1978; Ph.D., New York University, 1985*
Thomas C. Wright, Jr. *B.A., North Carolina, 1973; M.D., Harvard, 1977*

Adjunct Assistant Professors

Solange G. Abunassar. *M.D., American University of Beirut, 1968*
Alessandra Bini. *B.S., Milano (Italy), 1980; Ph.D., Columbia, 1987*
Larry E. Douglass. *B.A., Washington (St. Louis), 1959; M.D., Vanderbilt, 1960*
Howard B. Goldstein. *B.A., Colgate, 1955; M.D., State University of New York (Albany), 1959*
Arthur I. Hurvitz. *D.V.M., Michigan State, 1964; Ph.D., California (Davis), 1967*
Paul A. Krieger. *B.S., College of the City of New York, 1967; M.D., New York Medical College, 1971*
Robert D. Newman. *B.S., California (Los Angeles), 1958; M.D., 1962*
Joseph E. O'Brien. *B.A., Columbia, 1957; M.D., State University of New York (Downstate), 1961*

Assistant Professors of Clinical Pathology

John M. Aletta. M.A., Columbia, 1980; *Ph.D., 1984*
Jerome Owen Cantor. *B.A., Columbia, 1971; M.D., Pennsylvania, 1975*
Joseph M. Ceretta. *B.S., Fordham, 1969; M.S., 1971; Ph.D., 1976*
Frederic Clayton. *B.A., Rice, 1973; M.D., Washington, 1977*
Thomas Landes Clemens. *B.A., Goshen (Indiana), 1973; M.S., Pennsylvania State, 1975; Ph.D., London, 1980*
Angeles Garcia-Pardo. *M.D., Complutence (Madrid), 1971; Ph.D, 1976*
Margaret M. Grimes. *B.A., Rosemont College (Pennsylvania), 1971; M.D., New York Medical College, 1975*
Paul E. Harris. *B.A., California (Berkeley), 1978; Ph.D., Cornell, 1985*
Stephen Keller. *B.S., City College of New York, 1953; M.S., St. John's, 1955; Ph.D., Rutgers, 1959*
Alexander Krichevsky. *P.M., Soviet Army School of Medical Assistants (U.S.S.R.), 1970; D.V.M., Odessa Agricultural Institute (U.S.S.R.), 1975*
John F. O'Connor. *B.S., St. John Fisher, 1960; Ph.D., Rochester, 1969*
May Parisien. *M.D., State University (Port-au-Prince), 1966*
Howard Ratech. *B.S., Rensselaer Polytechnic Institute, 1972; M.D., State University of New York (Albany), 1976*

Assistant Clinical Professors

Stefan D. Epstein. *B.A., Columbia. 1956; M.D., State University of New York (Buffalo), 1960*
Steven H. Lewis (also Obstetrics & Gynecology). *B.A., Colorado, 1977; M.D., 1981*
Horoshi Nakazawa. *M.D., Keio (Tokyo), 1958*
Mohamed Osman. *D.V.M., Cairo, 1967; Ph.D., Columbia, 1983*
Neelavathy Pushparaj. *B.S., Madras (India), 1957; M.B.,B.S., 1961*
Elaine Reed. *B.S., State University of New York (Stony Brook), 1979; M.S., Columbia, 1981; Ph.D. 1983*
Henry G. Shriever. *B.A., Vermont, 1956; M.D., New York Medical College, 1960*

Assistant Clinical Professor of Neuropathology

Michael Kogan. *B.A., Miami (Florida), 1964; B.S., 1967; Ph.D., Virginia Polytechnic Institute, 1972*

SPECIAL LECTURERS

David Cowen, M.D.
Paul Ellner, Ph.D.
C. Zent Garber, M.D.
Austin D. Johnston, M.D.
Raffaele Lattes, M.D.
Conrad Pirani, M.D.
Leon Roizin, M.D.

LECTURERS

Michael Baden, M.D.
Paul A. Brown, M.D.
Hyman Donnenfeld, M.D.
Janis F. Klavins, M.D.
Lee L. Rubin, Ph.D.

INSTRUCTORS

Yaffa Mizrachi, Ph.D.
Soheyka Saadi, Ph.D.
Carol M. Troy, M.D., Ph.D.

INSTRUCTORS IN CLINICAL PATHOLOGY

Raimundo Gonzalez, M.D.
Elena Zegarelli-Schmidt, Ph.D.

At Mary Imogene Bassett Hospital

Associate Clinical Professor

Harlan D. Alpern. *B.S., Michigan, 1967; M.D., Chicago, 1971*

INSTRUCTORS IN CLINICAL PATHOLOGY

Charles A. Ellsworth, M.D.
William B. Guiney, M.D.

At Harlem Hospital Center

Professor

Jack W.C. Hagstrom. *B.A., Amherst, 1955; M.D., Cornell, 1959*

Clinical Professors

Prem Chauhan. F.Sc., Med., Punjab (India), 1942; *M.D., Cornell, 1959*
Carlos Navarro. *B.S., National University (Mexico), 1947; M.D., 1955*

Associate Clinical Professor

Angus C. Sampath (in Microbiology). *D.Sc., Strasbourg, 1966*

Assistant Professor of Clinical Pathology

Edward Moskovic. *M.D., Central (Madrid), 1956*

Assistant Clinical Professors

Claude J. Neptune, *M.D., Haiti, 1963*
Helen M.S. Richards. *M.B.,B.S., Colombo (Sri Lanka), 1969*
Louys Thomas. *M.D., Port-au-Prince (Haiti), 1965*

INSTRUCTORS IN CLINICAL PATHOLOGY

Margarita E. Jimenez, M.D.
Ranjit K. Sachdev, M.B.,B.S.

At Helen Hayes Hospital

Associate Professor of Clinical Pathology

William David Dempster. *Ph.D., Glasgow, 1979*

At Morristown Memorial Hospital

Professor of Clinical Pathology

Marianne Wolff. *B.A., Hunter, 1948; M.D., Columbia, 1952*

Associate Clinical Professor

Craig Dise. *B.S., Muhlenberg, 1971; M.D., Pennsylvania, 1975; Ph.D., 1978*

Assistant Clinical Professors

Nancy Joy Hunter. *B.S., Michigan, 1974; M.D., 1978*
Robert S. Katz. *B.A., Haverford, 1972; M.D., Albert Einstein, 1975*
Jory G. Magidson. *M.D., Columbia, 1978*

At Overlook Hospital

Clinical Professor

Bernard M. Wagner. *M.D., Hahnemann, 1946*

Assistant Clinical Professors

Steven L. Goldberg. *B.A., Kenyon, 1963; M.D., State University of New York (Downstate), 1968*
Anthony Marchand. *B.A., Connecticut, 1966; M.D., Duke, 1970*
Joel A. Roth. *B.A., Brooklyn, 1964; M.D., State University of New York (Downstate), 1968*
Donald L. Warkentin. *B.A., Yale, 1961; Ph.D., State University of New York (Syracuse), 1972*

ASSOCIATE IN CLINICAL PATHOLOGY

Frederick van Lente, M.D.

At St. Luke's-Roosevelt Hospital Center

Professor

Horton A. Johnson. *B.A., Colorado College (Colorado Springs), 1949; M.D., Columbia, 1953*

Professor of Clinical Surgical Pathology

Stephen F. Ryan. *B.S. Regis College (Denver), 1957; M.D., Colorado, 1961*

Associate Professor

David J. Volsky. *B.S., Ben-Gurion University (Israel), 1972; M.S., Hebrew University (Israel), 1975; Ph.D., 1979*

Associate Clinical Professor

Louise Lang Phillips. *B.S., William and Mary, 1934; M.A., Columbia, 1940; Ph.D., 1950*

Assistant Professors of Clinical Pathology

Kenneth F. Button. *B.A., Indiana, 1966; M.D., 1970*
Deng Fong Liau. *M.Sc., McGill, 1968; Ph.D., 1971*

Assistant Clinical Professors

Harold P. Gaetz. *B.S., McGill, 1953; M.D., 1958*
Martin Krumerman. *B.S., New York University, 1961; M.D., 1965*
Bozidar Lazarevic. *M.D., Belgrade, 1956*
John V. Scholes. *B.S., Trinity (Connecticut), 1970; M.D., Columbia, 1974*
Corazon Sian. *A.A., Santo Tomas (Philippines), 1958; M.D., 1963*

Associate Research Scientist

Efim I. Golub. *B.S., State University of Minsk (U.S.S.R.), 1958; Ph.D., Institute of General Genetics (U.S.S.R.), 1963; Sc.D., 1976*

INSTRUCTORS

Petra Banogon, M.D.
Mary J. Potash, Ph.D.

INSTRUCTORS IN CLINICAL PATHOLOGY

Elizabeth Ames, M.D.
Vijai Katatikorn, M.D.
Koji Sakai, M.D.
Rose-Sunitha Thayaparan, M.D

Pediatrics

Rueben S. Carpentier Professor and Chairman

Michael Katz (also Public Health). *B.A., Pennsylvania, 1949; M.D., State University of New York (Downstate), 1956; M.S., Columbia, 1963*

At Presbyterian Hospital

Professors

Ralph B. Dell. *B.A., Pomona, 1957; M.D., Pennsylvania, 1961*
Darryl C. De Vivo (also Sidney Carter Professor of Neurology). *B.A., Amherst, 1959; M.D., Virginia, 1964*
Anne A. Gershon. *B.A., Smith, 1960; M.D. Cornell, 1964*
Welton M. Gersony. *B.A., Syracuse, 1954; M.D., State University of New York (Upstate), 1958*
L. Stanley James (also Obstetrics & Gynecology). *M.D., Otago (New Zealand), 1948*
Robert B. Mellins. *B.A., Columbia, 1948; M.D., Johns Hopkins, 1952*
Sergio Piomelli. *B.A., Liceo Sannazzaro (Naples), 1948; M.D., Naples, 1954*
Michael R. Rosen (also Pharmacology). *B.A., Wesleyan, 1960; M.D., State University of New York (Downstate), 1964 David Shaffer (Irving Philips Professor of Child Psychiatry). M.B.,B.S., London, 1961; Academic Diploma Psychological Medicine, 1969*

Professor of Pediatric Surgery

R. Peter Altman (Rudolph H. Schullinger Professor of Pediatric Surgery) (also Surgery). *B.A. Colgate, 1955; M.S. Rochester, 1958; M.D., New York Medical College, 1961*

Professor of Pharmacology

Joseph Graziano. *B.S., Long Island, 1967; Ph.D., Rutgers, 1971*

Professors of Clinical Pediatrics

Abe Chutorian (also Neurology). *B.A., Manitoba, 1949; B.S., 1952; M.D., 1957*
Gerd J. A. Cropp. *M.D., Western Ontario, 1958; Ph.D., 1965*
Nicholas Cunningham (also Public Health). *B.A., Harvard, 1950; M.D., Johns Hopkins, 1955*
John C. Dower. *B.A., Johns Hopkins, 1950; M.D., 1954*
John M. Driscoll. *B.A., Hamilton, 1958; M.D., Bowman Gray, 1962*
Harold E. Fox (also Obstetrics & Gynecology). *M.Sc., Rochester and Oxford, 1972; M.D., Rochester, 1972*
Arnold P. Gold (also Neurology). *B.A., Texas, 1947; M.S., Florida, 1949; M.D., Lausanne, 1954*
Jerry C. Jacobs. B.A, Columbia, 1952; *M.D., 1956*
Anneliese L. Sitarz. *B.A., Bryn Mawr, 1950; M.D., Columbia, 1954*

Professor of Clinical Genetics & Development

Dorothy Warburton. *Ph.D., McGill, 1961*

Professor of Clinical Psychiatry

H. Donald Dunton. *M.D. Rochester, 1945*

Clinical Professors

Fred Agre. *B.A., Lafayette, 1957; M.D., Duke, 1961*
Russell S. Asnes. *B.A., Boston, 1959; M.D., Tufts, 1963*
Frederic M. Bomback. *B.A., Brandeis, 1965; M.D., New York University, 1969*
Roy E. Brown. *A.B., Columbia, 1952; M.D., 1956; D.T.M. & H., London, 1963; M.P.H., South Carolina, 1967*
William J. Davis. *B.A., Wilkes, 1961; M.D., Columbia, 1965*
Joseph A. Silverman. *B.A., Princeton, 1952; M.D., Columbia, 1956*

Senior Research Scientist

Salha S. Daniel (also Anesthesiology). *B.S., London, 1954; Ph.D., 1957*

Associate Professors

Richard Deckelbaum. *B.Sc., McGill, 1963; M.D., 1967*
Ehud Krongrad. *M.D., Hebrew (Jerusalem), 1965*
Gilbert W. Mellin. *B.S., Bethany, 1945; M.D. Johns Hopkins, 1949*
Akira Morishima. *M.D., Keio (Japan), 1954; Ph.D., 1961*
John F. Nicholson (also Pathology). *B.A., Vanderbilt, 1955; M.D., 1958*
Peter T. Rothstein (also Anesthesiology). *B.A., Brandeis, 1966; M.D., Albert Einstein, 1970*
Raymond I. Stark. *B.S., Columbia, 1963; M.D., 1970*

Associate Professors of Clinical Pediatrics

Jennifer J. Bell. *B.A., Swarthmore, 1953; M.D., New York University, 1961*
Fredrick Z. Bierman. *B.S., Union, 1969; M.D., State University of New York (Downstate) 1973*
Ronald Gould Emerson (also Neurology). *M.D., New York University, 1975*
Charles H. Feldman. *B.A., Columbia, 1966; M.D., State University of New York (Downstate), 1970*

James Garvin. *B.A., Harvard, 1968; M.D., Jefferson, 1976*
Allan Hordof. *B.A., Hobart, 1962; M.D., New York University, 1966*
Sudha Kashyap. *M.B.,B.S., St. John's (Bangalore, India), 1972*
Adrien Moessinger. *M.D., Lausanne, 1971*
Martin Nash. *B.A., Duke, 1960; M.D., 1964*
Jane Pitt. *B.A., Radcliffe, 1960; M.D., 1964*
Alice S. Prince. *B.A., Wellesley, 1971; M.D., Columbia, 1975*
Joan A. Regan. *B.S., Mt. St. Vincent, 1969; M.D., Missouri, 1974*
Tove S. Rosen. *B.A., Rochester, 1961; M.D., State University of New York (Downstate), 1965*
Karl F. Schulze. *B.A., Carleton, 1961; M.D., Rochester, 1965*

Associate Clinical Professors

Robert Appleby. Lafayette, 1957; *M.D., Duke, 1961*
William A. Bauman. *B.S., Harvard, 1943; M.D., Columbia, 1946*
Roger Challop. *B.S., Brooklyn, 1963; M.D., New York Medical College, 1967*
Bernard R. Feldman. *B.S., William and Mary, 1955; M.D., Chicago, 1959*
Burton Grebin. *B.A., Adelphi, 1962; M.D., New York Medical College, 1966*
Constance J. Hayes. *B.S., St. Rose, 1959; M.D. Loyola, 1965*
Mathilde Irigoyan. *B.A., Buenos Aires, 1966; M.D., 1971*
John J. Kangos. *B.S., Rutgers, 1945; M.D., Long Island, 1948*
Kenneth H. Katz. *B.A., Lafayette, 1968; M.D., New York Medical College, 1973*
George Lazarus. *B.A., Yale, 1967; M.D., Columbia, 1971*
Harriet E. McGurk. *B.A., Radcliffe, 1967; M.D., Albert Einstein, 1973*
Michael Novogroder. *B.S., Brooklyn, 1965; M.D., State University of New York (Upstate), 1969*
Jack Shiller. *B.A., North Carolina, 1947; M.D., Columbia, 1952*

Associate Clinical Professor of Anesthesiology

Jen-Tien Wung. *M.D., Tapei Medical College, 1956*

Associate Clinical Professor of Psychiatry

Arthur Green. *B.A., Rochester, 1951; M.D., Amsterdam, 1956*

Research Scientist

Rajasekhar Ramakrishnan. *B. Tech, India Institute of Technology, 1968; M.S., Columbia, 1971; D.Eng. Sc., 1974*

Assistant Professors

Linda J. Addonizio. *B.S., Stanford, 1974; M.D., Columbia, 1978*
Leslie Davidson (also Public Health) (Epidemiology) (in the Sergievsky Center). *B.A., Radcliffe, 1970; M.D., Columbia, 1978*
Ludovico Guarini. *M.D., Naples, 1974*
Daphne Hsu. *B.A., Radcliffe, 1978; M.D., Yale, 1982*
Anne Hurlet-Jensen. *M.D., Liege (Belgium), 1966*
Philip S. Larussa. *B.S., State University of New York (Stony Brook), 1970; M.D., Bolgna (Italy), 1978*
Stephen K.C. Ng (also Public Health) (in the Sergievsky Center). *B.S., La Salle (Hong Kong), 1967, M.B., B.S., Hong Kong, 1972; M.P.H., Columbia, 1981; Dr. P.H., 1986*
Stephen W. Nicholas. *B.S., Wyoming, 1975; M.D., Colorado, 1981*
Agathe Pachnis. *M.D., Athens, 1979*
Lynne M. Quittell. *B.A., Hampshire, 1975; M.D., Tel Aviv, 1981*
Andrew David Racine. *B.A., Harvard, 1974; M.D., New York University, 1983*
Lisa Saiman. *B.A., Cornell, 1977; M.D., Albert Einstein, 1983*
Thomas Joseph Starc. *B.A., California (Berkeley), 1972; M.D., Mt. Sinai,1976*

Assistant Professors of Clinical Pediatrics

Kwame Anyane-Yeboa. *M.D., Ghana, 1972*
Gaya S. Aranoff. *B.A., Barnard, 1972; M.D., Albert Einstein, 1975*
Robyn J. Barst. *B.A., Rochester, 1972; M.D., North Carolina, 1976*
Christine Marie Donnelly. *B.A., Manhattanville, 1973; M.D., Columbia, 1978*
Candace Jean Erickson. *B.A., George Washington, 1969; M.D., Maryland, 1973*
Sarmistha Bhaduri Hauger. *B.S., Texas, 1972; M.D., Loyola Stritch, 1976*
Ramamohana R. Kairam (also Neurology). *M.B.,B.S., Andhra (India), 1970*
Mary J. Marron-Corwin. *B.S., Malloy, 1980; M.D., Far Eastern, 1985*
Mary McCord. *B.A., Williams, 1978; M.D., Columbia, 1983; M.P.H., 1986*
Glenn J. B. Mendoza. *B.S., Philipines, 1972; M.D., 1976*
Celia Ores. *M.D., Berne (Switzerland), 1956*
Nan Salamon. *B.S., Cornell, 1975; M.D., Pittsburgh, 1981*
Ulana Sanocka. *B.S., Brooklyn College, 1968; M.D., New York University, 1974*
Robert L. Seigle. *B.A., Northwestern, 1970; M.D., Columbia, 1974*

Assistant Professor of Clinical Psychology

Donald E. Hutchings (also Psychiatry). *B.A., Wake Forest, 1959; M.A., Chicago, 1963*

Assistant Clinical Professors

Stephen M. Arpadi. *M.D., George Washington, 1982*
Michael Bartalos. *M.D., Heidelberg, 1960*
Alexander Blum, Jr., *B.S., Yale, 1944; M.D., Harvard, 1947*
Joseph M. Bordiuk. *B.S., Colgate, 1954; M.D., Cornell, 1958*
Jocelyn Brown. *M.D., Xavier, 1980*
Thomas M. Connor. *B.S., St. Francis, 1961; M.D., Bologna, 1961*
Marian B. Demeny. *B.A., Barnard, 1969; M.D., New York University, 1973*
Yvonne T. Driscoll. *B.A., Trinity, 1958; M.D., Women's Medical College of Pennsylvania, 1962*
T. Donald Eisenstein. *B.A., Johns Hopkins, 1952; M.D., State University of New York (Albany), 1956*
Jane Eliot Fried (in Psychiatry). *B.A., Vassar, 1964; M.D., Columbia, 1970*
Joseph W. Gaffney, *B.S., Boston, 1977; M.D., New York Medical College, 1981*
Marguerite J. Gates. *B.A., Barnard, 1950; M.D., Columbia, 1954*
Gustave Gavis. *B.A., Indiana, 1948; M.D., State University of New York (Downstate), 1952*
Stephen Glaser. *B.A., Columbia, 1960; M.D., New York University, 1964*
Bertram H. Grossman. *B.A., North Carolina, 1948; M.D., Georgetown, 1959*
Robert A. Hands, Jr. *M.D., Cornell, 1968*
Leonard Kasen. *B.S., Rutgers, 1953; M.S., 1954; M.D., Albert Einstein, 1960*
Stuart Kaufman. *B.A., State University of New York (Buffalo), 1975; M.D., Medical College of Pennsylvania, 1980*
Philip Kazlow. *B.A., Yeshiva, 1976; M.D., Mt. Sinai, 1980*
Murray D. Kuhr. *B.S., Cincinnati, 1961; M.D., Chicago, 1965*
Betty C. M. L. Kuo. *B.A., Vassar, 1959; M.D., State University of New York (Albany), 1964*
Nyla Lamm. *B.S., State University of New York (Stony Brook), 1980; M.S.W., 1982; Ed.M., Teachers College, 1984; Ed.D. 1988*
Elaine C. Lee. *B.A., Skidmore, 1971; M.A., New York University, 1972; M.D., Dartmouth, 1979*
Judith Luskin. *B.A., Radcliffe, 1974; M.D., Tufts, 1978*
Mona Milstein. *B.A., State University of New York (Binghamton), 1965; M.D., State University of New York (Buffalo), 1969*
Harriette R. Mogul. *B.A., Bryn Mawr., 1961; M.D., Albert Einstein, 1965*
Damyanti Moorjani (also Rehabilitation Medicine). *B.S., Bombay, 1953; M.D., Grant (Bombay), 1957*
Kenneth Pituch. *B.A., Michigan State, 1972; M.D., 1981*
Herbert Poch. *B.A., Columbia, 1949; M.D., 1953*
Morton H. Rachelson. *B.A., State University of New York (Syracuse) 1946; M.D. Tulane, 1950*

Margaret M. Rice. *B.S., Marymount, 1943; M.D., New York Medical College, 1947*
Roderick C. Richards. *B.A., Cornell, 1945; M.D., 1948*
Louis Rodrigues. *B.S., College of the City of New York, 1955; M.D., State University of New York (Downstate), 1959*
Malcolm S. Schwartz. D.O., College of Osteopathic Medicine and Surgery, 1967
Edith M. L. Kuo-Ying Shen. *M.D., Ludwig-Maximilian (Munich), 1960*
Kung-Tso Sheng. *M.D., St. John's, (Shanghai), 1954*
David Siegler. *B.S., Columbia, 1975; M.D., Tufts, 1979*
William H. Smith. *B.A., Rochester, 1941; M.D., 1944*
Susan Spear. *B.A., Wellesley, 1968; M.D., Columbia, 1972*
Elizabeth K. Stern. *B.A., Michigan State, 1967; M.S., Michigan, 1969; Ph.D., 1974; M.D., Columbia, 1978*
Margaret Ann Stillman. *B.A., Yale, 1973; M.D., Columbia, 1977*
David Wisotsky. *B.S., College of the City of New York, 1970, M.D., Albert Einstein 1974*

Assistant Clinical Professors of Psychiatry

Elisabeth B. Guthrie (also Psychiatry). *B.A., Sarah Lawrence, 1979; M.D., Albert Einstein, 1981*
Barbara Ann Liskin. *M.D., Columbia, 1979*
Boris Rubinstein. *M.D., Mexico, 1970*

Associate Research Scientists

Elizabeth Anisfeld. *B.A., Toronto, 1960; M.A., McGill, 1961; Ph.D., 1964*
Maria Ann Crisafi. *Ph.D., Illinois, 1985*
David Evans. *B.A., Harvard, 1964; M.A., Northwestern, 1969; Ph.D., 1975*
Moshe J. Levison. *B.A., Pennsylvania, 1965; Ph.D., Indiana, 1973*
Carol Seaman. *B.S., Southern California, 1964; M.S., New York University, 1977*
Sharon P. Steinberg. *B.S., City College of Yew York, 1967*
Deborah R. Wagner. *B.A., State University of New York (Albany), 1980; M.A., Ferkauf Graduate School of Psychology, 1985; Ph.D., 1989*
Xiuhua Wang. *B.S., Shanghai Fudan, 1982; M.S., California (Los Angeles), 1986; Ph.D., 1989*

SPECIAL LECTURER

Sylvia P. Griffiths, M.D.

LECTURERS

Albert Aharon, M.D.
Judith R. Marcus, M.D.
Lucille A. Perrotta, M.D.
Yaakov Shechter, Ph.D.

ASSOCIATES IN CLINICAL PEDIATRICS

Lilian Wah-Ying Chiu, M.D.
Maryann J. Colenda, M.D.
John L. Costa, M.D.
Ann L. Engelland, M.D.
Alan Kanter, *M.D.*
Peter F. Migel, *M.D.*
Neil Minikes, *M.D.*
Carlyn Ann Oppedisano, *M.D.*
I. Jill Ratner, *M.D.*
Robert M. Schwartz, *M.D.*
Elynn M. Sugarman, *M.D.*
Nikki Lynn Timko, *M.D.*
Mary Versfelt, *M.D.*
Elizabeth A. Wedemeyer, *M.D.*

ASSOCIATE IN CLINICAL NURSING

Jane C. Andersen, M.S.

INSTRUCTORS

Jose A. Camacho, M.D.
Patrick A. Caruso, M.D.
Amy R. Defelice, M.D.

INSTRUCTORS IN CLINICAL PEDIATRICS

Dipti P. Amin, M.D.
Heidi E. Beutler, M.D.
Dennis Brown, M.D.
Maury Buchalter, M.D.
Kuang-Chung Hu Chien, M.B.
Stephen S. Cowan, M.D.
Bernard Etra, M.D.
Arlene Falk,M.D.
Howard M. Friedman, M.D.
Janice Fern Klein, M.D.
Robert M. Klein, M.D.
Rosemary Klenk, M.D.
Michael L. Lapkin, M.D.
Dorothy Levine, M.D.
Sylvia Morgan, M.D.

INSTRUCTORS *(continued)*

Thomas A. Moulton, M.D.
Rosalinda Rubinstein, M.D.
Gail Schewitz, M.D.
Susan Skalsky, M.D
Tova G. Yellin, M.D.
Eric R. Yorke, M.D.

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Associate Clinical Professors

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Gerald B. Kolski. *B.A., Dartmouth, 1964; Ph.D., Purdue, 1969; M.D., Cornell, 1976*

ASSOCIATES IN CLINICAL PEDIATRICS

Douglas H. Cannon, M.D.
John G. Freehafer, M.D.
Ann Fay Mick, M.D.
Gregory J. Myers, M.D.
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At Harlem Hospital Center

Professor

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Professor of Clinical Pediatrics

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Associate Professor of Clinical Pediatrics

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Associate Clinical Professors

Vincent E. Hutchinson. *M.B.,B.S., West Indies, 1972*
Yusuf M. Khakoo. *M.B.,B.S., Bombay, 1962*

Assistant Professors

Natalia Kanem. *A.B., Harvard, 1976; M.D., Columbia, 1980*
Danielle Laraque. *B.S., California (Los Angeles), 1976; M.D., 1981*

Assistant Professors of Clinical Pediatrics

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Araceli R. Ancajas. *M.D., Santo Tomas (Phillipines), 1961*
Florence G. Crawford. *B.A., Drew, 1967; M.D., Cornell, 1971; M.P.H., Columbia, 1987*
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Assistant Clinical Professors

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Marguerita A. Silvera. *B.S., Brooklyn, 1969; M.D., Albert Einstein, 1973*
Maria S. Suarez. *B.S., Puerto Rico, 1973; M.D., 1978*
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Charles A. Welborn, M.P.H., *M.D., Tulane, 1980*

INSTRUCTORS IN CLINICAL PEDIATRICS

Beverly Anderson, M.D.
Jacqueline Avin, M.D.
Susan E. Champion, M.D.
Sofia Dela Cruz, M.D.
Delores J. Gayle-Thompson, M.D.
Shane P. Hoffman, M.D.
Emily Jackness. M.D.
Margaret A. Jackson, M.D.
Deborah Persaud, M.D.
Asma J. Sadiq, M.B., B.S.
Wond-Wossen Taddesse, M.D.
Rezkallah Toro, M.D.
Elizabeth J. Wallach, M.D.
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INSTRUCTOR IN CLINICAL NURSING

Carlether G. Burwell, M.A.

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Assistant Professor of Clinical Pediatrics

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At Morristown Memorial Hospital

Professor of Clinical Pediatrics

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Associate Clinical Professors

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Assistant Professors of Clinical Pediatrics

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Assistant Clinical Professors

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William Chernack. *A.B., Cornell, 1966; M.D., New York Medical College, 1970*
Martin Lewis Cohen. *M.D., State University of New York (Upstate), 1967*
Ella Cummins. *B.A., Smith, 1935; M.D., State University of New York (Albany), 1939*
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Henry J. Kim. *M.D., Seoul National University, 1962*
David E. Knoop. *B.A., Harvard, 1958; M.D., Yale, 1962*
Robert Kornblum. *B.A., Columbia, 1958; M.D., State University of New York (Downstate), 1962*
Mary Ann Lo Frumento. *B.A., Columbia, 1977; M.D., Pennsylvania Medical College, 1981*
William Lupatkin. *B.S., Columbia, 1965; M.S., 1966; Ph.D., 1970; M.D., Miami (Florida), 1974*
Gaines M. Mimms. *B.A., Duke, 1971; M.D., Bruxelles (Belgium), 1979*
Andrew Schenkman. *M.D., Chile, 1976*

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INSTRUCTORS IN CLINICAL PEDIATRICS

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Barry D. Weinreb, M.D.

At Overlook Hospital

Clinical Professors

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Associate Clinical Professors

Solomon J. Cohen. *B.A., Cornell, 1944; M.D., Johns Hopkins, 1951*
Stephen M. Golden. *M.D., New York University, 1970*

Assistant Clinical Professors

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Frederick C. Braun, Jr. *B.S., Georgetown, 1951; M.D., Jefferson, 1955*
Howard S. Britt. *B.A., M.D., Boston, 1970*
Steven Diamond. *B.S., Brooklyn, 1970; M.D., Pennsylvania, 1974*
Burton M. Feinsmith. *B.S., Arkansas, 1949; M.S., Florida, 1951; M.D., Berne, 1961*
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John H. Krikorian. *B.A., Yale, 1958; M.D., Bowman Gray, 1963*

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Sandy P. Waran. *M.D., Ceylon, 1968*

ASSOCIATES IN CLINICAL PEDIATRICS

Paul Avondoglio, M.D.
Wesley Boodish, M.D.
Martin Diamond, M.D.
Paul A. Kearney, M.D.
Barry Lauton, M.D.
John F. Vigorita, M.D.
DonaldWight, M.D.

INSTRUCTORS IN CLINICAL PEDIATRICS

Ghitta Eibschutz, M.D.
Carl H. Herman, M.D.
Ilene Hershman, M.D.
Alexander R. Horowitz, M.D.
Anita Joseph, M.D.

INSTRUCTORS *(continued)*

Victor S. Lamberto, M.D.
Shelly Lanzkowsky, M.D.
Donald A. Leichter, M.D.
Donna Mahlstedt, M.D.
Uday C. Mehta, D.C.H.
Alice Merkrebs, M.D.
Bharati S. Mullick, M.D.
John Owen Percy, M.D.
Vinnakota V. Rao, M.D.
Dudley A. Roberts, M.D.
Stanislawa Rosnowski, M.D.
Arvind P. Shah, M.D.
James Sorger, M.D.

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Professors

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Adjunct Professor of Public Health

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Professor of Clinical Pediatrics

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Associate Professor of Clinical Pediatric Virology

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Assistant Professor

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Assistant Professor of Clinical Child Development

Madeline W. Appell. *B.A., Queens, 1962; M.A., 1963*

Assistant Professor of Clinical Psychology

Harvey Haynes Mar. *B.S., Washington (Seattle), 1972; M.A., Columbia, 1973; Ph.D., 1977*

Assistant Clinical Professors

Dennis Allendorf. *B.S., Georgetown, 1965; M.D., New York Medical College, 1970*
Garth Alperstein. *M.B.,Ch.B., Cape Town, 1973*
Anastasios Anastasiades. *M.D., Athens, 1950*
Ellis J. Arnstein. *B.S., City College of New York, 1965; M.D., State University of New York (Downstate), 1969*
Saroj Sahgal Bakshi. *M.B., B.S., Government Medical College (Amritsar, India), 1960; M.D., Institute of Postgraduate Medical Education and Research (Chadigarh, India), 1969*
Carmelita V. Britton. *B.S., Rensselaer PolytechnicInstitute, 1973; M.D., State University of New York (Albany), 1973*
Richard Gunnar Carlson (also Medicine). *B.S., Trinity (Hartford), 1966; M.D., Columbia, 1970*
Alwyn Theodore Cohall. *B.A., Wesleyan, 1976; M.D., College of Medicine and Dentistry of New Jersey, 1980*
Herbert I. Cohen. *M.D., Johns Hopkins, 1949*
R. Ragabardial Dwarka. *B.S., Hebrew (Jerusalem), 1965; M.D., 1969*
Joan M. Flanigan. *B.A., Case Western Reserve, 1962; M.D., 1966*
Ranjeet G. Grover. *M.B.,B.S., Christian (India), 1960*
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Fadel M. Hochroth. *B.A., Louisville, 1953; M.D., 1957*
Nancy C. Holahan. *B.S., Fordham, 1966; M.D., College of Medicine and Dentistry of New Jersey, 1970*
Harry Kimmel. *B.A., St. Andrews (Bucharest), 1940; M.D., Bucharest, 1949*
Catherine Lodyjensky. *M.D., Montreal, 1943*
Neil Lombardi (also Neurology). *B.A., M.D., Boston, 1967*
Richard Mones. *B.A., Brooklyn, 1967; M.D., New York Medical College, 1971*
Farrokh Shahrivar. *M.D., Tehran, 1966*
Karen Soren. *B.A., Harvard, 1978; M.D., New York University, 1982*
Shantha Subramaniam. *M.B.,B.S., Madras (India), 1962*
Max F. Van Gilder. *B.S., Tulane, 1967; M.D., 1971*
Elizabeth Watkins. *B.A., Randolph-Macon Women's College, 1947; M.D., Columbia, 1951*

Assistant Clinical Professor of Family Practice

Grace M. Wang. *B.A., Michigan, 1975; M.D., Cornell, 1982*

Associate Research Scientist

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ASSOCIATES IN CLINICAL PEDIATRICS

Dora M. Alvarez, M.D.
Ricarda L. Baum, M.D.
Renata Frenkel, M.D.
Thomas H. Hyatt, Jr., M.D.
Ruth E. Kessler, M.D.
Kusum Khanna, M.B.B.S.
Richard Gary Merkler, M.D.
Edward A. Nichols, M.D.
Flora Ramirez, M.D.
Natalie Sarkanich, M.D.
Melissa Matthews Sedlis, M.D.
Barbara E. Strassberg, M.D.
Thelma Verano-Santiago, M.D.
Priscilla Ware, M.D.

INSTRUCTORS IN CLINICAL PEDIATRICS

Carlos Emilio Arzeno, M.D.
Cynthia G. Boakye, M.B.,Ch.B.
Reethamma Daniel, M.B.B.S.
Luminita M. David, M.D.
Morel Duverseau, M.D.
Catherine A. Lenz Canary, M.D.
Roberta E. Leon, M.D.
Pleno J. Moise, M.D.
Michael A. Nagel, M.D.
Amalia Reyes, M.D.
Milagros Santiago, M.D.
Ana B. Soto, M.D.
Geraldine M. Summa, M.D.
Eric C. Weiselberg. M.D.
Stanley E. Whittenburg, M.D.

Pharmacology

David Hosack Professor and Chairman

Brian F. Hoffman. *A.A., Princeton, 1943; M.D., Long Island, 1947*

Professors

J. Thomas Bigger, Jr. (also Medicine). *B.A., Emory, 1955; M.D., Georgia, 1960*
John Bilezikian (also Medicine). *B.A., Harvard, 1965; M.D., Columbia, 1969*
Joseph Graziano (in Pediatrics). *B.S., Long Island, 1967; Ph.D., Rutgers, 1971*
Norman Kahn (also Dental & Oral Surgery). *B.A., Columbia, 1954; D.D.S., 1958; Ph.D., 1964*
Harold C. Neu (also Medicine). *B.A., Creighton, 1956; M.D., Johns Hopkins, 1960*
Michael R. Rosen (also Pediatrics). *B.A., Wesleyan 1960; M.D., State University of New York (Downstate), 1964*
Wilbur H. Sawyer (Gustaveus A. Pfeiffer Professor). *B.A., Harvard, 1942; M.D., 1945; Ph.D., 1950*
Andrew L. Wit. *B.S., Bates, 1963; Ph.D., Columbia, 1968*

Adjunct Professors

Ira Cohen. *B.A., Columbia, 1969; M.D.,Ph.D., New York University, 1974*
Allan H. Conney (in Anesthesiology). *B.S., Wisconsin, 1952; M.S., 1954; Ph.D., 1956*
Paul F. Cranefield. *B.S., Wisconsin, 1946, Ph.D., 1951; M.D., Albert Einstein, 1964*
Peter K.T. Pang. *B.Sc., Hong Kong, 1964; M.S., Yale, 1968; Ph.D., 1970*
Jurg Schneider. *M.D., Basle, Switzerland, 1945*
Sidney Spector (also Anesthesiology). *B.S., Denver, 1948; M.S., 1950; Ph.D., Jefferson, 1956*
Robert M. Weiss. *B.S., Franklin and Marshall, 1957; M.D., State University of New York (Downstate), 1960*

Professor of Clinical Psychopharmacology

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Senior Research Scientist

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Associate Professors

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Assistant Professors

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Daniel E. Lemons (in Rehabilitation Medicine). *B.A., Goshen 1975; M.S., Portland State, 1978; M.Phil., Ph.D., Columbia, 1982*
Steve Sorota. *B.S., Connecticut, 1977; Ph.D., 1986*
Susan F. Steinberg (also Medicine). *B.S., Massachusetts Institute of Technology, 1972; M.D., Harvard, 1976*
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Adjunct Assistant Professors

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Walter Spinelli. *B.A., Milan (Italy), 1973; M.S., 1978; Ph.D., Columbia, 1984*

Associate Research Scientists

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Stephen M. Dillon. *B.S.E., Pennsylvania, 1976; M.S.E., Ph.D., 1984*
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Victor Molina-Viamonte. *M.D., Universidad Salvador (Buenos Aires), 1981*

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Assistant Professor of Clinical Pharmacology

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Physiology and Cellular Biophysics

John C. Dalton Professor and Chairman

Samuel C. Silverstein. *B.A., Dartmouth, 1958; M.D., Albert Einstein, 1963*

Professors

Qais Al-Awqati (also Robert F. Loeb Professor of Medicine). *M.B.,Ch.B., Baghdad, 1962*
Michel Ferin (in Obstetrics & Gynecology and the Center for Reproductive Sciences). *M.D., Louvain, 1964*
Michael Field (also Medicine). *B.A., Chicago, 1953; M.D., Boston, 1959*
Jorge Fischbarg (in Ophthalmology). *M.D., Buenos Aires, 1962; Ph.D., Chicago, 1971*

Claude P. J. Ghez (also Neurology) (in the Center for Neurobiology & Behavior). *B.Sc., Geneva, 1960; M.D., Harvard, 1964*
Eric R. Kandel (University Professor) (also Psychiatry). *B.A., Harvard, 1952; M.D., New York University, 1956*
Irving Kupferman (in Psychiatry) (in the Center for Neurobiology & Behavior). *Ph.D., Chicago, 1964*
Frederick R. Maxfield (also Pathology) (in the Center for Neurobiology & Behavior). *B.S., Union, 1971; Ph.D., Cornell, 1977*
David Schachter. *B.S., New York University, 1946, M.D., 1949*
James H. Schwartz (also Neurology) (in the Center for Neurobiology & Behavior). *B.S., Columbia, 1954; M.D., New York University, 1959; Ph.D., Rockefeller, 1964*
Robert K.S. Wong (also Neurology) (in the Center for Neurobiology & Behavior). *B.S., McGill, 1970; Ph.D., Alberta, 1975*

Adjunct Professor

Shu Chien. *M.B., National University of Taiwan, 1954; Ph.D., Columbia, 1957*

Associate Professors

Martin Blank. *B.S., College of the City of New York, 1954; M.D., Columbia, 1957; Ph.D., Cambridge, 1959*
Martin G. Low. *Ph.D., Birmingham (England), 1975*
David M. Stern. *M.D., Montpelier (France), 1972; D.Sc., Paris, 1978*

Research Scientist

John D. Loike. *B.A., Yeshiva, 1971; Ph.D., 1976*

Adjunct Research Scientist

Herbert H. Lipowsky. *B.S., Polytechnic Institute of Brooklyn, 1966; M.S., 1968; Ph.D., California, 1975*

Assistant Professors

Yvon E. Cayre (also Medicine). *M.D., Montpelier (France), 1972; D.Sc., Paris, 1978*
Jane Dodd (also in the Center for Neurobiology & Behavior). *Ph.D., Cambridge (England), 1979*
Amy B. MacDermott (in the Center for Neurobiology & Behavior). *B.A., Wells, 1973; Ph.D., Vermont, 1978*
Ofra Weinberger. *B.S., Brooklyn, 1976; Ph.D., Harvard, 1981*

Associate Research Scientists

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Lily M. Soo. *Ph.D., 1973*

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Assistant Professor

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Psychiatry

Lawrence Kolb Professor, Dean, and Chairman

Herbert Pardes. *B.S., Rutgers, 1956; M.D., State University of New York (Downstate), 1960*

At New York State Psychiatric Institute

Professors

Myron Hofer. *B.A., Harvard, 1954; M.D., 1958*
Eric R. Kandel (University Professor) (also Physiology & Cellular Biophysics) (in the Center for Neurobiology & Behavior). *B.A., Harvard, 1952; M.D., New York University, 1956*
Donald F. Klein. *B.A., Colby, 1947; M.D., State University of New York (Downstate), 1952*
David Shaffer (Irving Phillips Professor of Child Psychiatry) (also Pediatrics). *M.B., Ch.B., University of London, 1961; Academic Psychological Medicine, 1969*
Robert L. Spitzer. *B.A., Cornell, 1953; M.D., New York University, 1957*

Professor of Dentistry

Austin H. Kutscher. *B.A., New York University, 1945; D.D.S., Columbia, 1946*

Professor of Medical Psychology

Irving Kupferman (also Physiology & Cellular Biophysics) (in the Center for Neurobiology & Behavior). *Ph.D., Chicago, 1964*

Professors of Public Health

Denise Kandel (Sociomedical Sciences). *Ph.D., Columbia, 1960*
Myrna M. Weissman (Epidemiology). *M.S.W., Pennsylvania, 1958; Ph.D., Yale, 1974*

Professor of Social Sciences

Bruce Dohrenwend (also Public Health) (Epidemiology). *B.A., Columbia, 1950; Ph.D., Cornell, 1955*

Professors of Clinical Psychiatry

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Michael B. First, *B.S.E., Princeton, 1978; M.S., M.D., Pittsburgh, 1983*
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George R. Gewirtz. *B.A., Columbia, 1979; M.D., 1984*
Arthur E. Gillman. *B.S., Vermont, 1947; M.D., New York Medical College, 1950*

Kenneth Greenspan. *M.D., Albert Einstein, 1963*
Eric Hollander. *B.A., Brandeis, 1978; M.D., State University of New York (Downstate), 1982*
Andrei-Claudian Jaeger. *M.D., Medico-Pharmaceutical Institute (Romania), 1977*
Charles A. Kaufmann. *B.S., Massachusetts Institute of Technology, 1971; M.D., Columbia, 1977*
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Williams P. Owen. *B.A., Louisville, 1974; M.D., 1978*
Laszlo A. Papp, *M.A., Political Sciences (Hungary), 1978; M.D., Semmelweis School of Medicine (Hungary), 1981*
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Lawrence Sharpe. *M.B.,B.S., London, 1954*
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Barbara Ann Cornblatt. *B.A., State University of New York (Syracuse), 1964; M.B.A., City University of New York, 1977; Ph.D., New School for Social Research, 1978*
Donald J. Dillon. *Ph.D., Fordham, 1955*
Robert Dworkin (also Anesthesiology). *B.A., Pennsylvania, 1971; Ph.D., Harvard, 1977*
William P. Fifer. *B.S., Georgetown, 1970; M.A., North Carolina (Greensboro), 1976; Ph.D.,1980*
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Jesse Bernard Levine. *Ph.D., George Washington, 1976*
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SPECIAL LECTURERS

Harry R. Potter, M.D.
John L. Schimel, M.D.
Lilli C. Shalsha, M.D.
Miltiades Zaphiropoulos, M.D.

LECTURERS

Joseph Edward Arleo, M.D.
William C. Crain, M.D.
Juan-Carlos Echevarria, M.D.
Gloria Friedman, M.D.
Maurice R. Green, M.D.
Norman S. Handelman, M.D.
Jay Kwawer, M.D.
Richard Lasky, Ph.D.
Lois R. Mound, M.D.
Dagmar G. O'Connor, M.D
Dale H. Ortmeyer, Ph.D.
Daniel Pilowsky, M.D.
Mercedes N. Rudelli, M.D.
Arthur J. Rudy, Ph.D.

ASSOCIATES IN CLINICAL PSYCHIATRY

Salvadore E. Agaze, M.D.
Ted Eugene Becker, Jr., M.D
William H. Brownlee, M.D.
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ASSOCIATES *(continued)*

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Lauma U. Katis, M.D.
Allen M. Lans, M.D.
Henry Clay Mallard, M.D.
W. Daniel Nienaltow, M.D.
Arthur M. Perlman, M.D.
Mitchell Rosenthal, M.D.
Carlotta L. Schuster, M.D.
Ruth Szmarag, M.D.

ASSOCIATES IN CLINICAL PSYCHOLOGY

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INSTRUCTORS IN CLINICAL PSYCHIATRY

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INSTRUCTORS *(continued)*

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David K. Jordan, M.D.
Kenneth R. Jungblut, M.D.
Nancy A. Kochanowicz, Ph.D.
Marvin Roy Kremberg, M.D.
Zev W.E. Labins, M.D.
Woon Soon Lee, M.D
Fredrick John Matzner, M.D.
Helen G. Muhlbauer, M.D.
William S. Packar, M.D.
Henry A. Paul, M.D.
V. Rachel Phillips, M.D.
Henry A. Remet, M.D.
Kent L. Robertshaw, M.D.
Maria Rodriguez-Boulan, M.D.
George Edward Rowan, M.D.
Edith B. Rubenstein, M.D.
Jeffrey H. Sacks, D.O.
Morisa Schiff-Mayer, M.D.
Keith Sedlacek, M.D.
Jane Simon, M.D.
Martha C. Troutman, M.D.
Maria L. Velez, M.D.
David S. Weinberger, M.D.
Pauline E. Weiss, M.D.
Barbara Wilson, M.D.
Jane Zirin, M.D.
Joseph A. Zito, M.D.

INSTRUCTORS IN CLINICAL PSYCHOLOGY

Shoshana M. Goldman, Ph.D.
Peter G. Lincoln, Ph.D.
Karen E. Moncher, Ph.D.
Pasqual J. Pantone, M.D.
Marcia Rosen, Ph.D.
Barbara B. Thacher, Ph.D.

Public Health

Joseph Delamar Professor and Dean

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Biostatistics

Professor and Director of Division

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Professor of Clinical Public Health

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Associate Clinical Professor

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Assistant Professors

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Myunghee Paik (in Sergievsky). *B.S., Seoul National, 1982; M.S., Pittsburgh, 1984; Ph.D., 1987*

Adjunct Assistant Professors

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Assistant Professor of Clinical Public Health

Priya J. Wickramaratne (in Psychiatry). *B.S., London, 1968; M.S., Stanford, 1970; Ph.D., Yale, 1984*

SPECIAL LECTURER

Livia Turgeon, M.S.

LECTURERS

Mark Davies, M.P.H.
John P. Orazem, M.S.

Environmental Health Sciences

Professor and Director of Division

I. Bernard Weinstein (also Frode Jensen Professor of Medicine) (also Genetics & Development) (in the Comprehensive Cancer Center). *B.S., Wisconsin, 1951; M.D., 1955*

Professors

Dezider Grunberger (also Biochemistry & Molecular Biophysics) (in the Institute of Cancer Research). *M.Sc., Technical (Czechoslovakia), 1950; Ph.D., Czechoslovakia Academy of Sciences, 1956; Sc.D., 1968*
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Clinical Professor of Public Health

Granville H. Sewell. *B.S., Massachusetts Institute of Technology, 1959; Ph.D., 1966*

Associate Professors

Vincent T. Covello. *B.A., Cambridge, 1971; M.A., 1973; Ph.D., Columbia, 1976*
Frederica P. Perera. *B.A., Radcliffe, 1963; M.P.H., Columbia, 1976; Dr. P.H., 1981*
Regina P. Santella. *B.S., Brooklyn, 1969; M.S., Massachusetts, 1971; Ph.D., City University of New York, 1976*
Marco Zaider (also Radiation Oncology). *M.S., Bucharest, 1968; Ph.D., Tel Aviv, 1976*

Associate Professor of Occupational Medicine

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Adjunct Associate Professor

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Research Scientist

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Assistant Clinical Professor

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Assistant Clinical Professor of Ophthalmology

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LECTURERS

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Jean B. Cropper, M.P.H.
Martin K. Diner, M.P.H.
Herman Ellis, M.D.
Henry Hermo, Jr., Ph.D.
Alan M. Jefferey, Ph.D.
Michael McCann, Ph.D.
Thomas T. Shen, Ph.D.
Harwant Singh, M.B.,B.S.
John T. Tanacredi, Ph.D.
Haig-Michael D. Utidjian, M.B.,B.S.
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Charlotte A. Stueve. *B.A., Michigan, 1971; M.A., Chicago, 1974; Ph.D., California, 1985*
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Adjunct Assistant Professors

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Mary Ann Chiasson. *B.A., Bennington, 1972; M.S., New York University, 1978; M.P.H., Columbia, 1985; Dr.P.H., 1988*
Gretchen Dieck. *B.A., Smith, 1976; M. Phil., Yale, 1979; Ph.D., 1982*
Ann B. Goodman. *B.A., Radcliffe, 1953; M.A., George Washington, 1963; M.S., Columbia, 1972*
Rita H. Hindin, *B.A., Princeton, 1975; M.P.H., Columbia, 1977; Ph.D., 1986*
John L. Kiely (in Sergievsky Center). *B.A., Dartmouth, 1974; M.A., New School for Social Research, 1976; Ph.D., Columbia, 1984*
Beryl Koblin. *B.A., Delaware, 1978; Sc.M., Johns Hopkins, 1982; Ph.D., 1987*
Paul S. May. *B.S., College of the City of New York, 1951; M.S., State University of New York (Syracuse), 1952; D.Sc., Philadelphia College of Pharmacy, 1955; M.P.H., Columbia, 1970*
Alfredo Morabia. *M.D., Geneva, 1978; M.A., Johns Hopkins, 1987; Ph.D., 1989*
Janet B. Schoenberg. *B.A., Swarthmore, 1967; M.Phil., Yale, 1970; M.P.H., 1973*
Annette Stemhagen. *B.A., Pennsylvania, 1973; M.P.H., Pittsburg, 1975; Dr. P.H., 1982*
Rand L. Stoneburner. *B.S., Presbyterian (South Carolina), 1971; M.D., Tulane, 1975; M.P.H., Harvard, 1981*
Scott Stryker. *B.A., Rice, 1973; M.D., Baylor, 1977; M.P.H., Harvard, 1982; Dr. P.H., 1987*
Rickey Wilson. *B.A., Texas, 1968, M.S., Columbia, 1985; M.D., Texas, 1972*

Assistant Professors of Clinical Public Health

Deborah S. Hassin. *B.A., California (Los Angeles), 1972; M.S., Columbia, 1980; M. Phil., 1985; Ph.D., 1986*
Wendy W. Huebner. *B.S., Wisconsin, 1966; M.P.H., Columbia, 1985; Ph.D., 1990*
Ruth Ottman (in the Sergievsky Center). *B.A., California (Berkeley), 1975; Ph.D., 1980*
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Sharon B. Schwartz. *B.A., Yeshiva, 1973; M.A., Columbia, 1974; Ph.D., 1985; M.S., 1988*
Sam R. Toussie. *B.A., Vermont, 1972; M.S., Columbia, 1976; Ph.D., 1984*
Susan A. Wilt. *B.A., Bennington, 1964; M.S., Columbia, 1978; Ph.D., 1985*

LECTURERS

Gertrud S. Berkowitz, Ph.D.
Stephen M. Friedman, M.D., M.P.H.

Geriatrics and Gerontology

John E. Borne Professor of Clinical Psychiatry and Director of Division

Barry J. Gurland. *M.B.,Ch.B., Capetown, 1955*

Professor of Clinical Public Health

Ruth Bennett (in Psychiatry). *B.A., Brooklyn, 1955; Ph.D., Columbia, 1962*

Assistant Professor of Clinical Public Health

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Associate Research Scientists

Virginia W. Barrett. *A.A., Colby Sawyer, 1961; B.A., Columbia, 1964; M.Ed., 1980; Dr.P.H., 1987*
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Ernest J. Millman. *B.A., Queens, 1969; M.A., M.Phil., Ph.D., Columbia, 1978; M.P.H., 1984*

SPECIAL LECTURER

Sidney Katz, M.D.

LECTURERS

Eloise H. P. Killeffer. Ed. M.
Julie I. Pellman, Ph.D.
Hila E. Richardson, Dr. P.H.
Shura Saul, Ed.D.
Anil K. Verma, M.B.,B.S.

Health Administration

Professor and Director of Division

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Professors

Lowell E. Bellin. *B.S., Yale, 1948; M.D., State University of New York (Downstate), 1951; M.P.H., Harvard, 1964*
Samuel Wolfe. *M.D., Toronto, 1950; M.P.H., Columbia, 1960; Dr.P.H., 1961*

Adjunct Professors

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Noreen M. Clark. *B.S., Utah, 1965; M.A., Columbia, 1972; Ph.D., 1976*
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Clinical Professor

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Associate Professor

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Robert Boyar. B. Arch., Rensselaer Polytechnic Institute, 1957
Willine Carr. *B.A., North Carolina (Greensboro), 1967; M.P.H., North Carolina (Chapel Hill), 1970; Dr.P.H., Columbia, 1982*
Annette Choolfaian. *B.S., Bridgeport, 1964; M.P.A., New York University, 1972*
Anita Stiles Curran. *B.A., Connecticut, 1951; M.D., New York Medical College, 1955; M.P.H., Columbia, 1974*
William E. Gold. *B.A., State University of New York (Stony Brook), 1970; M.S.S., Hebrew (Israel), 1972; Ph.D., Minnesota, 1982*
Gail Marie Gordon. *B.S., University of Minnesota, 1968; M.P.H., Johns Hopkins, 1973; Dr.P.H., Columbia, 1979*
Nancy Graham. M.P.H., Columbia, 1972; *Dr.P.H., 1976*
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William H. Hermann. *B.S., Missouri, 1951; M.S., Yale, 1953*
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Eleanore Rothenberg. *B.A., Brooklyn, 1955; M.P.A., New York University, 1969; Ph.D., 1975*
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Assistant Clinical Professors

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Michael P. O'Connor. *B.A., St. John's, 1972; M.P.A., City University of New York, 1977*
Richard S. Thomas. B. Arch., Pratt Institute, 1968
Richard P. Zucker. *B.E., Cooper Union, 1970; M.P.H., Columbia, 1981*

SENIOR LECTURER

Melanie C. Dreher, Ph.D.

LECTURERS

Kenneth Adamec, M.S.
Frederick D. Alley, M.S.
Allan C. Anderson, M.S.
Barbara Bengen, M.B.A.
Jay M. Bolnick, M.P.H.
Patricia A. Chambers, M.B.A.
Martin Cherkasky, M.D.
Thomas J. Craig, M.D.
Victor G. Demarco, B.S.
Ronald B. Dreskin, M.B.A.
John J. Farmer, C.P.A.
Charmaine M. Fitzig, Dr.P.H.
Raymond Fleishman, M.S.
Nicholas Freudenberg, Dr.P.H.
Gary Gambuti, M.P.A.
Doris Goldberg, M.D.
Margaret T. Grossi, M.D.
David Harris, M.D.
Cathy Idema, M.P.H.
Florence Kavaler, M.D.
Stuart M. Lane, Ph.D.
David E. Leach, III, J.D.
Jacob J. Lindenthal, Dr.P.H.

LECTURERS *(continued)*

Regina Loewenstein, M.A.
Daniel R. Longo, Sc.D.
Charles H. Meyer, M.S.
Anthony C. Mustalish, M.D.
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James M. Pierce, M.P.H.
Peter M. Raith, M.A.
Peter Rogatz, M.D.
Alan H. Rosenblut, M.B.A.
Rachel Rotkovitch, M.S.
Alvin Strelnick, M.D.
John W. Wohltman, Jr., M.A.

ASSOCIATES

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INSTRUCTORS

Neal A. Demby, D.M.D., M.P.H.
Ruth Haase, M.A.
Lin H. Mo, M.P.H., M.B.A.
Joseph B. Stamm, M.P.A.
Ilona W. Surick, M.P.H.

Nutrition

Tilden-Weger-Bieler Professor of Preventitative Medicine and Director of Division

DeWitt S. Goodman. *A.B., Harvard, 1951; M.D. 1955*

Professor

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Assistant Clinical Professor

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LECTURERS

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Population and Family Health

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Professors of Clinical Public Health

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Associate Professors

Andrew R. Davidson. *B.A., Stirling; M.A., Illinois, 1971; Ph.D., 1974*
Debra Kalmus. *B.A., State University of New York (Buffalo), 1973; M.S.W., Bryn Mawr, 1976; M.A., Michigan, 1977; Ph.D., 1980*

Associate Professors of Clinical Public Health

Sally A. Lederman (in Institute of Human Nutrition). *B.S., Brooklyn, 1957; M.S., Columbia, 1976; M.Phil, 1979; Ph.D., 1980*
Pearila Namerow. *B.A., Pennsylvania, 1970; M. Phil., Columbia, 1974; Ph.D., 1976*

Associate Clinical Professors

Rosemary Barber-Madden. *B.A., Jersey City State, 1968; M.S., Hunter, 1977; Ed.D., Temple, 1980*
Audrey Tittle Cross. *B.S., California (Berkeley), 1967; M.P.H., 1969; J.D., California (Hasting), 1978; Ph.D., California (Berkeley), 1985*
Judith E. Jones. *B.A., Hunter, 1956; M.S., Columbia, 1983*
William A. Van Wie. *B.A., Wooster, 1961; B.D., Pittsburgh Seminary, 1964; M.P.H., North Carolina, 1968; Dr.P.H., 1974*

Assistant Professors

William S. Blaner (also in the Institute of Human Nutrition). *B.S., Maryland, 1972; M.S., Tennessee, 1975; Ph.D., 1979*
Virginia A. Rauh. *B.A., Middlebury, 1969; M.S.W. Smith, 1971; Sc.D., Harvard, 1982*

Adjunct Assistant Professors

Catherine Cowell. *B.S., Hampton Institute, 1945; M.S., Connecticut, 1947*
Michele G. Shedlin. *B.S., Columbia, 1968; M.A., 1975; M. Phil., Ph.D., 1982*

Assistant Professors of Clinical Public Health

Linda F. Cushman. *Ph.D., New York University, 1986*

Renee J. Holt. *B.S., Tennessee, 1980; J.D., Rutgers, 1985; M.P.H., Columbia, 1986*
Ann M. Kimball. *B.S., Stanford, 1972; M.P.H., Washington, 1981*
Donald J. Lauro. *B.A., California (Berkeley), 1966; M.A., 1971; Ph.D., Australian National (Canberra), 1979*
Norman L. Weatherby. *B.A., North Texas State, 1974; M.A., 1978; Ph.D., Florida, 1983*

Assistant Clinical Professors

Bruce Armstrong. *B.A., Marist, 1971; D.S.W., New York University, 1976*
Bill L. Bower. *B.A., Stanford, 1973; M.P.H., Columbia, 1989*
Wendy Chavkin. *B.A., Michigan (Ann Arbor), 1973; M.D., State University of New York (Stony Brook), 1978; M.P.H., Columbia, 1980*
Alain Damiba. *M.D., Ecole Superieure Des Sciences de la Sante, 1985; M.P.H., Columbia, 1988*
Ismail T. Diene. *M.D., Dakar (Africa), 1981; M.P.H., Columbia, 1987*
Angela J. Kamara. R.N., Forester Hill College of Nursing (Scotland), 1969; C.N.M., Withington Maternity Hospital (England), 1971
Mark S. Rapoport. *M.D., Boston, 1970; M.P.H., Harvard, 1973*
Linda A. Randolph. *B.S., Howard, 1962; M.D., 1967; M.P.H., California (Berkeley), 1971*
Maria J. Wawer. *B.S., New Brunswick (Fredericton), 1974; M.D., McMaster, 1977; M.H.,Sc., Toronto, 1980*

Associate Research Scientists

Alpha B. Diallo. *B.A., Howard, 1963; M.A., 1968*
Deborah P. Maine. *B.A., Barnard, 1972; M.P.H., 1982*
Regina McNamara. *B.A., St. Elizabeth, 1950; M.S.W., Fordham, 1964; M.P.H., Columbia, 1978; Dr.P.H., 1985*
Stanley Musgrave. *B.A., Haverford, 1977; M.D., Rochester, 1981; M.P.H., North Carolina, 1985*
Michael S. Piraino. *B.A., Allegheny, 1974; J.D., Cornell, 1977*
Eugene M. Weiss. *B.A., California (Berkeley), 1963; M.P.H., 1965; Ph.D., Michigan, 1972*

LECTURERS

Elizabeth Bernardik, Ph.D.
Alan B. Bernstein, M.D.
Dennis Carlson, M.D.
M. Barbara Cicatelli, M.A.
Rebecca J. Cook, M.P.A., J.D.
Morton Lebow, M.A.
Jill Markowitz, M.P.H.
Jean Pakter, M.D.

Sociomedical Sciences

Professor and Director of Division

Eugene Litwak (also Sociology). *B.A., Wayne State, 1948; Ph.D., Columbia, 1958*

Professors

Denise B. Kandel (in Psychiatry). *B.A., Bryn Mawr, 1952; M.A., Columbia, 1953; Ph.D., 1960*
Seymour Spilerman (Levi Professor of Social Sciences). *B.A., Pomona, 1959; M.A., Brandeis, 1961; Ph.D., Johns Hopkins, 1968*

Clinical Professors

Geoffrey Gibson. *B.A., Nottingham, 1959; M.A., Ohio, 1967; Ph.D., 1968*
Joseph Marbach. *B.A., Drew, 1965; D.D.S., Pennsylvania, 1960*

Senior Research Scientist

Ann F. Brunswick. *B.A., Hunter, 1946; M.A., Clark, 1947; Ph.D., Columbia, 1976*

Associate Professors

Ronald Bayer. *B.A., State University of New York (Binghamton), 1964; M.A., Chicago, 1967; Ph.D., 1976*
John L. Colombotos. *B.A., Columbia, 1949; M.A., 1952; Ph.D., Michigan, 1961*

Associate Professors of Clinical Public Health

John P. Allegrante. *B.S., State University of New York (Cortland), 1974; B.S., Illinois, 1976; Ph.D. 1979*
Mindy Fullilove (also Psychiatry). *A.B., Bryn Mawr, 1971; M.S., Columbia, 1974; M.D., 1978*

Associate Clinical Professor of Social Sciences

Carol Caton. *B.S., Columbia, 1962; M.S.N., Yale, 1965; Ph.D., Michigan, 1971*

Research Scientist

Mata K. Nikias (also Dental & Oral Surgery). *D.D.S., Athens, 1953; M.P.H., Columbia, 1960; Ph.D., 1976*

Assistant Professors

Mary Clare Lennon. *B.A., Fordham, 1970; M.A., Columbia, 1975; Ph.D., 1980; M.S., 1985*
John L. Martin. *B.A., California (Berkeley), 1974; Ph.D., City University of New York, 1982; M.P.H., Columbia, 1984*
Peter A. Messeri. *B.S., Massachusetts Institute of Technology, 1972; M.A., Columbia, 1976; Ph.D., 1985*

Adjunct Assistant Professors

Judith Barr. *B.A., Goucher, 1957; Sc.D., Johns Hopkins, 1976*
Margery Braren. M.A., Columbia, 1963; *Ph.D., 1971*
Lawrence Krasnoff. *B.A., College of the City of New York, 1969; Ph.D., 1979*
Betty W. Levin. *B.A., Barnard, 1969; M.A., Columbia, 1977; M.Phil., 1980; Ph.D., 1985*
Debra Murphy. *B.S., New Mexico, 1975; M.S., Texas Christian, 1981; Ph.D., 1983*

Assistant Professors of Clinical Public Health

Donald H. Gemson. *B.A., Hamilton (New York), 1974; M.D., New York Medical College, 1978; M.P.H. Columbia, 1985*
Carol Lewis. *B.A., Radcliffe, 1955; M.A.T., Johns Hopkins, 1962; M.S.W., Maryland, 1966; M.P.H., Johns Hopkins 1976; Sc.D., 1983*
Robert E. Fullilove (in Psychiatry). *B.A., Colgate, 1966; M.S., State University of New York (Syracuse), 1972; Ed.D.,Columbia, 1984*

Assistant Clinical Professors

James A. Lipton. *B.S., College of the City of New York, 1967; D.D.S., Columbia, 1971; Ph.D., 1980*
Michael S. Wilkes. *M.D., Connecticut, 1985*

Associate Research Scientists

Angela A. Aidala. *B.A., Miami, 1967; Ph.D., Columbia, 1980*

Laura Lee Dean. *B.A., City College of New York, 1974; M.A., Columbia, 1978; Ed.M., 1980*
Stanley Fisher. *B.S., College of the City of New York, 1949; M.S.W., Columbia, 1955; Ph.D., City University of New York, 1977.*
John L. Thompson. *B.A., M.A., Cambridge, 1971; Ph.D., California (Los Angeles), 1979*
Carole S. Vance. *B.A., Hunter, 1968; Ph.D., Columbia, 1970*
C. Naomi Velez. *B.A., Puerto Rico, 1970; M.A., 1973; M. Phil., Columbia, 1978; Ph.D., 1981*

Senior Research Associate

Paul W. Haberman. *B.S., Pennsylvania, 1948; M.B.A., New York University, 1961*

Research Associate

Athilia Siegmann. *B.S., Queens (New York), 1944; M.A., Columbia, 1947*

SPECIAL LECTURER

Jack Elinson, Ph.D.

LECTURERS

Raymond Fink, Ph.D.
Kim Hopper, Ph.D.
Corinne Kirchner, Ph.D.
Victoria H. Raveis, Ph.D.
Lucille Rosenbluth, M.P.A.

INSTRUCTORS

Charlotte Ellis, Ph.D.
Rochelle Kern, Ph.D., M.P.H.

Tropical Medicine

Associate Professor and Acting Director of Division

Philip A. D'Alesandro (Parasitology) (also Microbiology). *B.S., Rutgers, 1952; M.S., 1954; Ph.D., Chicago, 1958.*

Professors

Dickson D. Despommier (Parasitology) (also Microbiology). *B.S., Fairleigh Dickinson, 1962; M.S., Columbia, 1964; Ph.D., Notre Dame, 1967.*
Michael Katz (Reuben S. Carpientier Professor of Pediatrics). *B.A., Pennsylvania, 1949; M.D., State University of New York (Downstate), 1956; M.S., Columbia, 1963.*

Clinical Professor

John D. Frame. *B.A., Wheaton, 1938; M.D., Northwestern, 1943.*

Assistant Professors

Mary Gwo-Shu Lee. *B.S., National University of Taiwan, 1978; M.S., 1981; Ph.D., New York University, 1985*
Deborah A. Russell. *B.A., University of Texas, 1972; M.S., Texas A & M, 1977; D.V.M., 1980; Ph.D., 1983*

Assistant Clinical Professor

Martin G. Blechman. *B.S., George Washington, 1949; M.S., Columbia, 1953; M.D., Jefferson, 1957*

Radiation Oncology

Acting Chairman

Chu Huai Chang. *B.S., Shanghai (China), 1941; M.D., 1944*

At Presbyterian Hospital

Professor

Eric J. Hall (also Radiology) (Physics). D. Phil, Oxford, 1962; *D.Sc., 1978*

Professor of Radiation Biology

Basil V. Worgul (in Ophthalmology). *B.S., Miami, 1969; Ph.D., Vermont, 1974*

Professor of Clinical Radiation Oncology

Charles R. Geard (Radiation Biophysics). *B.A.S., Melbourne, 1960; M.Sc., Tasmania, 1969; Ph.D., Australian National, 1973*

Professor of Clinical Pathology

Carmia Borek. *M.S., George Washington, 1961; Ph.D., Weitzmann Institute (Israel), 1967*

Associate Professors

Howard Ira Amols. *B.S., Cooper Union, 1970; M.S., Brown, 1973; Ph.D., 1974*
Marco Zaider (also Public Health). *M.S., Bucharest, 1968; Ph.D., Tel Aviv, 1976*

Associate Clinical Professor

Karen S. Fountain. *B.A., Northern State (South Dakota), 1968; M.D., Maryland, 1972*

Assistant Professors

Myles Barry Astor. *B.A., Columbia, 1976; M.A., 1981; M. Phil., 1982*
David Jonathan Brenner. *B.A., Oxford, 1974; M.Sc., London, 1976; Ph.D., Surrey, 1979*
Greg A. Freyer. *B.S., Cincinnati, 1976; Ph.D., Missouri, 1981*
Mary K. Hayes. *B.A., Manhattanville, 1975; M.S., Boston, 1980; M.D., Ross, 1984*
Tom K. Hei. *B.S., Wisconsin, 1958; Ph.D., New York University, 1974*
Steven R. Isaacson. *B.S., Pennsylvania State, 1969; M.D., Jefferson, 1973*
Paul J. Kliauga (Radiation Biophysics). *B.S., Chicago, 1958; Ph.D., New York University, 1974*
Howard B. Lieberman. *B.S., Brooklyn, 1977; Ph.D., Rutgers, 1982*
Richard Calvin Miller. *B.A., Iowa, 1969; M.S., 1972; Ph.D., 1976*
Peter B. Schiff. *B.A., Brandeis, 1975; M.S., Albert Einstein, 1978; Ph.D., 1980; M.D., 1984*
Laurie Roizin Towle. *B.S., Marymount, 1967; M.S., New York University, 1971*

Assistant Professors of Clinical Radiation Oncology

Mary K. Martel. *B.S., Illinois Benedictine College, 1978; M.A., Clark, 1980; Ph.D., 1982*
Jaime S. Rubin. *Ph.D., Toronto, 1984*
Cheng Shie Wuu. *B.S., National Tsing Hua University (Taiwan), 1979; M.S., 1982; Ph.D., Kansas, 1985*

Associate Research Scientists

Diane Esposito. *B.S., Fordham, 1976; M.S., 1978; Ph.D., 1982*
Gerhard Randers-Pehrson. *B.S., Rensselaer Polytechnic Institute, 1966; M.D., Maryland, 1979*

SPECIAL LECTURERS

Chu Huai Chang, M.D.
Harald Rossi, M.D.

Radiology

James Picker Professor and Chairman

Philip O. Alderson. *B.A., Washington (St. Louis), 1966; M.D., 1970*

At Presbyterian Hospital

Professors

Walter E. Berdon. *B.A., Syracuse, 1950; M.D.,1955*
Kent Ellis. *M.D., Yale, 1950*
Frieda Feldman. *B.A., New York University, 1953; M.D., 1957*
Eric J. Hall (Physics) (also Radiation Oncology). *Ph.D., Johns Hopkins, 1942*
Sadek Hilal. *M.D., Cairo, 1955*
Jeffrey H. Newhouse. *B.A., Princeton, 1963; M.D., Harvard, 1967*

Professor of Medical Informatics

Paul Clayton (in Medicine). *B.A., Utah, 1966; M.S., Arizona, 1969; Ph.D., 1973*

Adjunct Professors

Zang-Hee Cho. *B.S., Seoul National University, 1960; M.S., 1962; Ph.D., Uppsala, 1966*
Lawrence A. Shepp. *B.S., Polytechnic Institute of Brooklyn, 1958; M.A., Princeton, 1960; Ph.D., 1961*
Charles Springer. *B.S., St. Louis, 1962; M.S., Ohio, 1964; Ph.D., 1967*

Professors of Clinical Radiology

John H. M. Austin. *B.A., Harvard, 1961; M.D., Yale, 1965*
Yahya M. Berkman. M.D, Istanbul, 1952
Jack Farman. *M.B.,Ch.B., University of Cape Town (South Africa), 1948; M.D., 1963*
Rashid Fawwaz. *M.D., American University of Beirut, 1960; Ph.D., California (Berkeley), 1968*
Donald L. King. *B.A., Stanford, 1956; M.D., Columbia, 1960*
Eric C. Martin. *B.A., Oxford, 1963; M.A., 1967; M.D., St. Thomas (London), 1967*
Edward L. Nickoloff (Radiation Physics). *B.S., Carnegie Institute of Technology, 1965; M.S., New Hampshire, 1968; Sc.D., Johns Hopkins, 1977*
Ralph Schlaeger. *B.S., Wisconsin, 1942; M.D., 1945*

Associate Professor

Edward S. Amis, Jr. *B.S., Arkansas, 1963; M.D., Northwestern, 1967*

Associate Professors of Clinical Radiology

Sara Abramson. *B.A., Sarah Lawrence, 1967; M.D., Mt. Sinai, 1971*
Thane Asch. *B.A., Columbia, 1951; M.D., Cornell, 1955*

Gilbert J. Beers. *B.A., Yale, 1972; M.D., Boston, 1976*
Lawrence M. Boxt. *B.A., California (Berkeley), 1970; M.D., New York Medical College, 1974*
Peter D. Esser. *B.A., Brown, 1961; M.S., Adelphi, 1964; Ph.D., 1971*
Monique C. Katz. *B.A., Vassar, 1959; M.D., Albert Einstein, 1963*
Karen Laffey. *B.A., Bryn Mawr, 1968; M. Phil., Yale, 1971; Ph.D., 1974; M.D., 1977*
David W. Seldin. *B.S., Massachusetts Institute of Technology, 1968; M.S,, Colorado, 1970; M.D., New York University, 1975*
Alan J. Silver. *B.A., Harvard, 1967; M.D., Rochester, 1973*
Theodore Sheng-Tao Wang. *B.S., National Mukden Medical College (China), 1952; M.S., Nebraska, 1958; Ph.D., Maryland, 1964*

Associate Professor of Clinical Neuropsychology

Isak Prohovnik (also in Psychiatry and in Neurology). *M.S., Lund (Sweden), 1980; Ph.D., 1981*

Associate Clinical Professors

Harry Agress, Jr., *B.A., Tufts, 1968; M.D., 1972*
Kaaren Nyhus Bergquist. *B.S., Wisconsin, 1962; M.D., Case Western Reserve, 1968*
Jacqueline C. Brunetti. *B.A., Manhattanville, 1971; M.D, State University of New York (Downstate), 1975*
Sundara R. Ganti. *M.B.,B.S., Guntur Medical College (India), 1967*
Herman W. Lubetsky. *B.S., College of the City of New York, 1948; M.D., Geneva, 1953*
Kevin L. Macken. *M.D., National (Ireland), 1947*
Robert Silbey. *B.A., Columbia, 1952; M.D., 1955*

Assistant Professors

Ronda Bixon. *B.S., Tufts, 1976; M.D., 1981*
Charles H. Bush. *B.S., Polytechnical Institute of New York, 1977; M.D., Mt. Sinai, 1982*
Dewitte T. Cross, III. *B.A., Vanderbilt, 1975; M.D., Alabama,1980*
George I. Getrajdman. *B.A., Rutgers, 1976; M.D., John Hopkins, 1980*
Robin L. Greenspan. *B.A., Franklin & Marshall, 1977; M.D., Pennsylvania, 1981*
Robert M. Jaffe. *B.A., Queens (New York), 1974; M.D., Tufts, 1978*
Glyn Johnson. *B.A., Cambridge, 1977; M.S., Aberdeen, 1978; Ph.D., 1984*
Jose Katz (also Medicine). *B.S., Illinois, 1963; M.S., 1964; Ph.D., 1967; M.D., Berlin, 1980*
Christopher C. Ng. *B.A., Winston Salem, 1980; M.D., North Carolina, 1984*
Chang-Hyun Oh. *B.S., Seoul National University, 1979; M.S.,Korea Advanced Institute of Science and Technology, 1982; Ph.D., 1985*
Benjamin M. Romney. *M.D., Columbia, 1977*
Carrie B. Ruzal-Shapiro. *B.A., Princeton, 1978; M.D., Columbia, 1982*
Linda M. Sanders. *M.D., Pennsylvania, 1982*
Ronald B. Staron. *B.S., Villanova, 1977; M.D., College of Medicine and Dentistry of New Jersey, 1982*
Alicia Zwass. *M.D., Wroclawo (Poland), 1968*

Assistant Professors of Clinical Radiology

Agnes Boxhill. *B.S., City College of New York, 1974; M.D., Columbia, 1979*
Marilyn E. Lerner. *B.A., Albert Einstein, 1977; M.D., Pennsylvania, 1984*
In Ki Mun. *B.A., Pomona, 1975; M.S., Cornell, 1978; Ph.D., 1980*
Ellen F. Silverstein. *B.A., Brandeis, 1962; M.A., Columbia, 1963; M.D., State University of New York (Downstate), 1969*

Assistant Clinical Professors

Gregory Marc Carsen. *B.A., Oberlin, 1965; M.D., State University of New York (Downstate), 1969*

Susan J. Frank. *B.A., Pennsylvania, 1972; M.D., Columbia, 1977*
Harvey L. Hecht. *B.A.. Amherst, 1958; M.D., Albert Einstein, 1962*

SPECIAL LECTURERS

David H. Baker, M.D.
William B. Seaman, M.D.

ASSOCIATES IN CLINICAL RADIOLOGY

Ajoy K. Dutta, M.S.
Wendy Woehr, M.S.

INSTRUCTOR IN CLINICAL RADIOLOGY

Gary J. Dee, M.D.

At Mary Imogene Bassett Hospital

Adjunct Assistant Professor

Stephen W. Nagy. *Ph.D., Connecticut, 1959*

Assistant Clinical Professors

Lawrence Barnowsky. *B.A., Hofstra, 1972; M.S., Rutgers, 1974; M.D., State University of New York (Albany), 1978*
Vittal B. Chanamolu. *M.D., Kakatiya Medical College (India), 1972*
Rajendrakumar Dalal. *M.B.,B S., D.V.M. Medical School, (India), 1969*
Harry R. Hartmann. *M.D., Yale, 1959*
Stephen A. Hughes. *B.A., Dartmouth, 1978; M.D., State University of New York (Buffalo), 1983*
Katherine Lloyd. *B.A., Radcliffe, 1970; M.D., Rochester, 1975*
David L. Sommerville. *B.A., Washington & Jefferson, 1964; M.D, Pennsylvania, 1968*
Peter Wright. *B.A., Albion (Michigan), 1971; M.D., Michigan, 1975*

At Harlem Hospital Center

Professor of Clinical Radiology

Jan Jakob Smulewicz. *M.D., Erlangen (Germany), 1951*

Associate Clinical Professor

Theodore H. Stent. *B.A., Talledega, 1944; M.D., Meharry, 1948*

Assistant Professors

Roberta C. Locko. *B.A., Manhattanville, 1972; M.D., George Washington, 1976*
Virgiliu G. Necula. *M.D., Faculty of Medicine (Romania), 1949*

Assistant Professors of Clinical Radiology

Jeanne E. Armstrong. *B.A., Mt. Holyoke, 1949; M.D., Columbia, 1952*
Laurencia B. Regalado. *M.D., St. Tomas (Manila), 1957*

Assistant Clinical Professors

Norma H. Aquino. *M.D., Santo Tomas (Philippines), 1964*
Christopher A. Johnson. *B.A., Howard, 1943; M.D., 1947*
Candido P. Quinones. *M.D., Santo Domingo, 1966*

Allan J. Schwartz. *B.A., City College of New York, 1967; M.S., Harvard, 1968; M.D., Columbia, 1974*
Abdulhamid R. Vazir. *M.D., Bombay, 1942*

INSTRUCTORS IN CLINICAL RADIOLOGY

Nabil Arslan, M.D.
Serge Balmir, M.D.
Gilles M. Hendrick, M.D.
Gary Roxland, M.D.

At Morristown Memorial Hospital

Clinical Professor

Gilbert S. Melnick. *B.A., Cornell 1951; M.D., State University of New York (Downstate), 1954*

Assistant Clinical Professor

Lawrence C. Swayne. *B.S., Ursinus (Pennsylvania), 1975; M.D., Rutgers, 1979*

At St. Luke's-Roosevelt Hospital

Professor

Ronald C. Ablow. *B.A., Harvard, 1954; M.D., Rochester, 1962*

Professor of Clinical Radiology

Guy D. Potter. *B.S., Chicago, 1957; M.D., 1960*

Clinical Professor

Kuo-York Chynn. *B.S., National Tung-Chi University (Shanghai), 1945; M.D., 1949; M.S., St. Louis. 1954*

Associate Professors

Ernest G. Depuey. *A.B., Duke, 1969; M.D., Baylor, 1976*
Souheil Saddekni. *M.D., Damascus (Syria), 1972*

Associate Professors of Clinical Radiology

Richard Palmer Gold. *B.A., Tufts, 1965; M.D., 1969*
Lucy E. Hann. *B.A., Saratoga (New York), 1968; M.S., Dartmouth, 1971; M.D., Harvard, 1973*
Chester J. Kay. *B.A., Michigan, 1956; M.D., State University of New York (Downstate), 1960*

Associate Clinical Professors

Meyer Alpert. *B.S., College of the City of New York, 1942; M.D., Middlesex, 1945*
Jeanne W. Baer. *B.S., Connecticut, 1960; M.D., Columbia, 1964*
John T. Hsu. *M.D., National University of Taiwan, 1957*
Rolando Dario Singson. *B.S., Santo Tomas (Philippines), 1965; M.D., 1970*
Bernard Suster. *B.S., State University of New York (Brooklyn), 1964; M.D., State University of New York (Downstate), 1968*

Assistant Professors

Karen Teresa Brown. *M.D., Boston, 1979*
Terry S. Desser. *B.A., Princeton, 1979; M.D., Columbia, 1984*
Jon H. Edwards. *B.S., Texas, 1967; M.D., Tulane, 1971*
Susan Hilton. *M.D., Medical College of Pennsylvania, 1975*
Alexander G. Khandji. *B.S., St. Francis, 1975; M.D., State University of New York (Downstate), 1980*
Madhuri Kirpekar. *B.A., New York University, 1974; M.D., State University of New York (Downstate), 1978*
Suzanne J. Smith. *B.A., Carleton, 1966; M.D., Medical College of Pennsylvania, 1971*
Jerrold B. Teitcher. *B.S., Brooklyn, 1976; M.D., State University of New York (Downstate), 1980*

Assistant Professors of Clinical Radiology

Benjamin Bashist. *B.S., Brooklyn, 1972; M.D., Albert Einstein, 1975*
Andrew J. DeRogatis. *M.D., Rutgers, 1975*
Carol L. Hilfer. *B.A., Barnard, 1967; M.D., Albert Einstein, 1971*
Thomas Lowinger. *B.S., Brooklyn, 1970; M.A., Columbia, 1972; Ph.D., State University of New York (Downstate), 1981*
Anita Gross Moallem. *B.S., Brooklyn, 1960; M.D., Albert Einstein, 1964*
Richard Michael Schaffer. *M.D., State University of New York (Downstate), 1976*
Alvaro Vallejo. *M.D., Del Valle (Colombia), 1967*

Assistant Clinical Professors

Michael Abiri. *M.D., Tehran, 1972*
David S. Marsden. *Ph.D., Jefferson, 1968*
Theodora Serban. *B.S., Lyceum Regina Maria (Bucharest), 1947; M.D., Medical School (Bucharest), 1953*

SPECIAL LECTURERS

Virginia Kanick, M.D.
Leonard M. Liegner, M.D.

Rehabilitation Medicine

A. David Gurewitsch Professor and Acting Chairman

Stanley J. Myers. *B.A., New York University, 1957; M.D., State University of New York (Downstate), 1961*

At Presbyterian Hospital

Professor of Rehabilitation Medicine

John A. Downey (Simon Baruch Professor). *M.D., Manitoba, 1954; D. Phil., Christ Church (Oxford), 1962*

Associate Professor

Lucien J. Cote (also Neurology). *B.A., Vermont, 1951; M.D., 1954*

Associate Clinical Professors

Antonio Cocchiarella. *M.D., Bari (Italy), 1953*
Sanders W. Davis. M.D., Texas, 1965

Assistant Professor

Fredi Kronenberg (Irving Assistant Professor). *B.S., Cornell, 1972; Ph.D., Stanford, 1979*

Assistant Professor of Pharmacology

Daniel Eugene Lemons. *B.A., Goshen, 1974; M.S., Portland, 1978; M.Phil., Columbia, 1982; Ph.D., 1986*

Assistant Professors of Clinical Rehabilitation Medicine

Jose A. Alonso. *B.A., Columbia, 1979; M.D., 1983*
Joanne P. Borg-Stein. *B.A., Tufts, 1980; M.D., Albert Einstein, 1984*
Victor J. Cisek. *B.S., City University of New York (City College), 1983; M.D., Mt. Sinai, 1985*
Daniel C. Fechtner, *B.S., Northwestern, 1982; M.D., 1984*
Anthony J. Pisciotta. *B.A., Hofstra, 1971; M.D., Rome, 1980*

Assistant Clinical Professors

Francis J. Foca. *B.S., Fordham, 1957; M.D., Bologna (Italy), 1966*
Carolina O. McCagg. *B.A., Barnard, 1962; M.D., Yale, 1966*
Jonathan Moldover. *B.A., Trinity (Connecticut), 1970; M.D., Columbia, 1974*
Damyanti G. Moorjani (also Pediatrics). *B.S., Bombay, 1953; M.D., Grant (Bombay), 1957*
Kathleen R. Watson. *M.B., B.S., West Indies, 1971*

Associate Research Scientist

Martha E. Heath (also Pharmacology). *B.S., California (Hayward), 1973; M.A., 1975; Ph.D., Cambridge (Great Britain), 1979*

SPECIAL LECTURER

Robert C. Darling, M.D.

LECTURER

Andrew J. Cole, M.D.

ASSOCIATES IN CLINICAL REHABILITATION MEDICINE

Alfred Hess, D.O.
John Joseph Kraus, M.D.
Howard Liss, M.D.
Robert P. Narcessian, B.S.
Robert Stone, M.S.

INSTRUCTORS IN CLINICAL REHABILITATION MEDICINE

Nelson Colon, M.D.
Michele C. Helfgot, M.A.
Glenn F. Hutnick, A.A.
Donald Liss, M.D.
Robert J. Mitchell, M.D.
Gregory J. Mulford, M.D.
Peter D. Natale, D.P.M.
Zachary M. Pine, M.D.
Areta Podhorodecki, M.D.
John T. Raftis, M.D.
Carol Vandenakker, M.D.

At Harlem Hospital Center

Professors of Clinical Rehabilitation Medicine

Albert Anderson. *B.A., Columbia, 1948; M.D., Harvard, 1952*
Herbert L. Thornhill. *B.S., Pittsburgh, 1951; M.D., Howard, 1955*

Clinical Professor

Yasoma B. Challenor. *B.A., Hunter, 1959; M.D., State University of New York (Downstate), 1963*

Associate Clinical Professor

Wanda Brodzka. *M.D., Academy of Medicine (Warsaw), 1954*

Assistant Professors of Clinical Rehabilitation Medicine

Thomas Abraham. *B.Sc., St. Philomena's, 1953; M.D., Kasturba Medical College, 1961*
Iluminado C. Nebab. *M.D., Santo Tomas, 1959*

Assistant Clinical Professor

Serge Fenelon (also Pediatrics). *M.D., Lausanne, 1973*

SPECIAL LECTURER

Ivan T. Donev, M.D.

INSTRUCTORS IN CLINICAL REHABILITATION MEDICINE

Armand Demosthenes, M.D.
Sosamma B. George, M.D.

INSTRUCTOR IN CLINICAL OCCUPATIONAL THERAPY

Sandhya E. Zarapkar, M.A.

INSTRUCTOR IN CLINICAL PHYSICAL THERAPY

Joseph A. Malloy, M.D.

At Helen Hayes Hospital

Assistant Professor of Clinical Rehabilitation Medicine

Arun Bhattacharyya. *B.S., Bangabasi (Calcutta), 1950; M.D., Nilratan Sirca Medical College (Calcutta), 1955*

ASSOCIATES IN CLINICAL REHABILITATION MEDICINE

Lata D. Bhansali, M.D.
Mary Guarracini, M.D.

At St. Luke's-Roosevelt Hospital Center

Associate Clinical Professors

Patrick J. Fazzari. *B.S., Manhattan, 1963; M.D., State University of New York (Albany), 1967*
Stanley Wainapel. *B.A., M.D., Boston, 1970*

Assistant Professor of Clinical Rehabilitation Medicine

Jeffrey L. Cole. *B.S., Queens, 1973; M.D., Guadalajara, 1977*

Assistant Clinical Professor

Young Sei Kwon. *M.D., Catholic (Korea), 1960*

INSTRUCTOR IN CLINICAL OCCUPATIONAL THERAPY

Cheryl King, M.S.

Occupational Therapy

Associate Professor and Director of Program

Barbara Neuhaus. *B.A., Keuka, 1950; O.T.R., Columbia, 1952; M.A., 1960; Ed.D., 1980*

Associate Clinical Professor

Gordon G. Williamson. *B.A., Emory, 1968; M.S., Columbia, 1970; Ph.D., 1978*

Adjunct Assistant Professor

Jane P. Bear-Lehman. *B.S., Wisconsin, 1973; M.S., Illinois, 1981*

Assistant Profesors of Clinical Occupational Therapy

Janet Falk-Kessler. *B.S., Pennsylvania, 1974; M.A., Columbia, 1978*
Anne Mazur-Robinson. *B.S., Columbia, 1978; M.A., 1983*
Patricia A. Miller. M.A., Columbia, 1978

ASSOCIATE IN CLINICAL OCCUPATIONAL THERAPY

Margaret Ann Brown, M.A.

INSTRUCTORS IN CLINICAL OCCUPATIONAL THERAPY

Ruth Dickey, M.A.
Karyn D. Epstein, B.S.
Elaine D. Fondiller, M.S.
Susan J. Gelb, B.S.
Roger J. Ideishi, M.A.
Karen Kayton, M.A.
Carlotta B. Kip, M.S.
Lori Lieman, B.S.
Elaine M. McCreanor, M.S.
Pamela H. Miller, M.A.
Christopha Moreland, M.S.
Elise A. Salantrie, M.A.
Tammi B. Silverman, B.S.
Chaye L. Warburg, M.S.
Lisa L. Zoldan B.S.

Physical Therapy

Assistant Professor and Director of Program

Bonnie Teschendorf. *B.S., New York University, 1965; M.S., New School for Social Research, 1981*

Assistant Professors

Cynthia M. Chiarello. *B.S., State University of New York (Fredonia), 1977; M.S., Duke, 1979; Ph.D., New YorkUniversity, 1987*
James E. Gordon. *B.A., State University of New York (Downstate), 1974; M.A., Columbia, 1981; Ed.M., 1983; Ed.D., 1985*

Assistant Professor of Clinical Physical Therapy

Mary Joan Day. *B.S., St. Louis, 1961; M.S., Pennsylvania, 1972*

SPECIAL LECTURER

Mary E. Callahan, M.A.

ASSOCIATES IN CLINICAL PHYSICAL THERAPY

Theodore Corbitt, M.A.
Carl Gargiulo, M.A.
Theresa M. Morrone, B.A.
Howard J. Phillips, Jr., M.S.
Paul Ribera, B.S.

INSTRUCTORS IN CLINICAL PHYSICAL THERAPY

Susan T. Alexander, B.S.
Margaret Beyda, B.S.
Lori Buck, B.S.
Rita Cheng, B.S.
Daniel E. Ciolek, M.S.
Ann Edgar, B.S.
Linda E. Fieback, M.A.
Rita Hamburgh, M.A.
Mary K. Horrigan, B.S.
Michael J. Katz, B.S.
Gail L. King, M.S.
Kelly McGinnis, M.S.
Ann P. Michaels, M.S.
Terrence O'Halloran, M.S.
Lindi Oberon, M.A.
Debbie A. Organ, M.S.
Edward M. Pisarski, M.S.
Marylee Purrington, M.S.
Georgia Reidel, B.S.
Gay Rosenberg, M.A.
Christine W. Wade, M.A.

Surgery

Valentine Mott Professor; Johnson and Johnson Professor and Chairman

Keith Reemtsma. *B.S., Idaho State, 1945; M.D., Pennsylvania, 1949*

At Presbyterian Hospital

Professors

R. Peter Altman (Rudolph N. Schullinger Professor of Pediatric Surgery) (also Pediatrics). *B.A., Colgate, 1955; M.S., Rochester, 1958, M.D., New York Medical College, 1961*
Frank Gump. *B.A., Harvard, 1951; M.D. New York University, 1955*
Mark A. Hardy. *B.A., Columbia, 1958; M.D., Albert Einstein, 1962*
Norman E. Hugo (Plastic). *B.A., Williams, 1955; M.D., Cornell, 1959*
Thomas C. King. (Jose M. Ferrer Professor) B.A, Utah, 1950; *M.D., 1954; M.A., Missouri, 1963*
Paul Lo Gerfo. *B.S., Rensselaer Polytechnic Institute, 1961; M.S., 1963; M.D., State University of New York (Upstate) 1967*
James R. Malm. *B.A., Princeton, 1949; M.D., Columbia, 1956*
John B. Price, Jr. M.A., Texas, 1948; *M.D., Johns Hopkins, 1950*
Henry M. Spotnitz (George H. Humphreys, II Professor). *B.A., Harvard, 1962; M.D, Columbia, 1966*

Professors of Clinical Surgery

Frederick O. Bowman, Jr. *B.A., North Carolina, 1948; M.D., Pennsylvania, 1952*
Kenneth A. Forde. *B.S., City College of New York, 1954; M.D., Columbia, 1959*
Alfred M. Markowitz. *B.A., New York University, 1948; M.D., Washington (St. Louis), 1952*
John N. Schullinger. *B.A., Princeton, 1951; M.D., Columbia, 1955*

Professor of Clinical Pathology

Nicole Suciu-Foca. *B.S., Bucharest, 1959; M.S., 1960; Ph.D., 1965*

Clinical Professor

Bashir Ahmad Zikria. *B.S., George Washington, 1954; M.D., Johns Hopkins, 1958*

Senior Research Scientist

David V. Habif. *B.S., Columbia, 1936; M.D., 1939*

Associate Professors

Roman Nowygrod. *B.A., Harvard, 1966; M.D., Columbia, 1970*
Eric A. Rose. *B.A., Columbia, 1971; M.D., 1975*
Charles J. H. Stolar. *B.A., Washington (St. Louis), 1970; M.D., Georgetown, 1974*

Adjunct Associate Professor of Pathology

Ah-Kau Ng. *B.A., National Chung Hsing University (Taiwan), 1969; M.D., State University of New York (Plattsburgh), 1972; Ph.D., Temple, 1975*

Associate Professor of Clinical Dental & Oral Surgery

Steven M. Roser (also in Otolaryngology). *B.A., Middlebury, 1964; D.M.D., Harvard, 1968; M.D., 1972*

Associate Professors of Clinical Surgery

Joseph A. Buda. *B.A., Columbia, 1951; M.D., Cornell, 1955*
Alfred Jaretzki, III. *B.A., Harvard, 1941; M.D., 1944*
George J. Todd. *B.S., Iona, 1970; M.D., Pennsylvania State, 1974*
Michael Treat. *B.A., Pennsylvania, 1971; M.D., Jefferson, 1976*
Collin J. Weber. *B.A., Princeton, 1967, M.D., Columbia, 1971*

Associate Clinical Professor

Sven Kister. *B.A., Dartmouth, 1955; M.D., Harvard, 1958*

Assistant Professors

Alan Benvenisty. *B.S., Union, 1974; M.D., Columbia, 1978*
David Tak Wai Chiu. *B.A., Missouri, 1969; M.D., Columbia, 1973*
Alison Estabrook. *B.A., Barnard, 1974; M.D., New York University, 1978*
Ira J. Fox. *A.B., Harvard, 1972; M.D., Columbia, 1976*
Peter L. Geller. *B.A., Harvard, 1971; M.D., Columbia, 1980*
Thomas J. Kirby. *B.S., Western Ontario, 1974; M.D., 1978*
Robert E. Michler. *B.A., Harvard, 1978; M.D., Dartmouth, 1981*
Jan M. Quagebeur. *B.Sc., Facultes Universitaire, 1965; M.D, Catholic University, 1969*
Craig Richey Smith. *B.A., Williams, 1970; M.D., Case Western Reserve, 1977*
Paul Matthew Starker. M.A., Harvard, 1976; *M.D., Columbia, 1980*
Mark R. Sultan. M.A.,*B.A., Brandeis, 1978; M.D., Columbia, 1982*

Assistant Clinical Professors

Paul H. Gerst. *B.A., Columbia, 1948; M.D., 1952*
Leif O. Holgersen. *B.A., Taylor (Indiana), 1960; M.D., College of Medicine and Dentistry of New Jersey, 1965*
Peter S. Liebert. *M.D., Harvard, 1962*
Jeffrey L. Zitsman. *B.A., Johns Hopkins, 1972; M.D., Tufts, 1976*

Associate Research Scientists

Shanta M. Modak. *Ph.D., Haffkine Institute (Bombay), 1969*
Shrishailam S. Yemul. *B.S.C., Shivaji (Khapur, India), 1965; M.S.C., 1968; Ph.D., National Chemical Laboratory (Poona, India), 1974*

SPECIAL LECTURERS

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Carl R. Feind, M.D.
Arthur B. Voorhees, M.D.
Philip Wiedel, M.D.

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Ronald N. Ollstein, M.D.
Allen D. Rosen, M.D.

INSTRUCTOR

M. Kamel Abouzahr, M.D.

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Spencer E. Amory, M.D
Harold M. Bruck, M.D.
John A. Chabot, M.D.
Mark David Sherman, M.D.
Charles A. Slanetz, M.D.
James S. Todd, M.D.

At Mary Imogene Bassett Hospital

Professor of Clinical Surgery

David A. Blumenstock. *B.A., Union (Schenectady), 1949; M.D., Cornell, 1953*

Clinical Professors

Michael S. Gold. *B.S., Miami, 1961; M.D., 1965*
John E. Olson. *B.A., Kansas, 1953; M.D., 1956*

Associate Clinical Professor

Rodman D. Carter (in Urology). *B.A., Harvard, 1950; M.D., Columbia, 1954*

Assistant Professors of Clinical Surgery

James Bordley, IV. B.A, Yale, 1965; *M.D., Columbia, 1970*
Patrick Allen Dietz. *B.A., Holy Cross, 1966; B.M. Sc., Dartmouth, 1968; M.D., Harvard, 1970*
Roger W. MacMillan, II. *B.S., Trinity, 1961; M.D., Columbia, 1965*

At Harlem Hospital Center

Professors of Clinical Surgery

Barbara Barlow. *B.A., Vassar, 1960; M.A., Columbia, 1963; Ph.D., 1964; M.D. Yeshiva, 1967*
Harold P. Freeman. *B.A., Catholic, 1954; M.D., Howard, 1958*

Associate Professor of Clinical Surgery

Colin W. McCord. *B.A., Williams, 1949; M.D., Columbia, 1953*

Associate Clinical Professors

David M. Carberry. *Ph.D., Providence, 1947; M.D., Jefferson, 1951*
Ferdinand A. Ofodile. *B.S., Northwestern, 1964; M.D., 1968*
John W. Parker, Jr. *B.A., Fisk, 1942; M.D., Meharry, 1945*
Mohamad H. Parsa. *B.S., Tehren, 1957; M.D., 1963*

Assistant Professor

Soji Oluwole. *B.Sc., Ibadan, 1967; M.B., B.S., 1970*

Assistant Professors of Clinical Surgery

Monqidh M. Al-Sawwaf. *M.D., Pahlavi, 1976*
Arthur Cooper (in the Institute of Human Nutrition). *B.A., Harvard, 1971; M.D., Pennsylvania, 1975*
Ganepola A. Ganepola. *B.S., Kyoto, 1966; M.D., 1967*

Assistant Professor of Clinical Orthopedic Surgery

Shearwood J. McClelland. *B.A., Princeton, 1969; M.D., Columbia, 1974*

Assistant Clinical Professors

Rajunder P. Gandhi. *M.B.,B.S., Institute of Medicine (Mandalay), 1966*
Ruben Oropeza. *B.S., Mexico, 1948; M.D., 1955*
Carlton E. Patrick. *M.D., University of the Saar (Hamburg, Germany), 1957*

Assistant Clinical Professor of Neurological Surgery

Robert W. Shick. *B.A., Columbia, 1948; M.D., New York Medical College, 1953*

Assistant Clinical Professor of Otolaryngology

Ransford C. Newman, *M.B.B.S., London, 1960*

SPECIAL LECTURER

Robert F. Morton, M.D.

ASSOCIATES IN CLINICAL SURGERY

Matthew D. Branche, M.D.
Urbano K. Guarin, M.D.
Malcolm Moley, M.D.
Pierre G. Van Bockstaele, M.D.

INSTRUCTORS IN CLINICAL SURGERY

Albert K. Adu, M.D.
Elizabeth A. Almeyda, M.D.
Gerard S. Audige, M.D.
Deodatt V. Bendre, M.D.
Egel Francois, M.D.
Edoardo Giuliani, M.D.
Robert N. Holtzman, M.D.
Avtar S. Josen, M.D.
Barnett Miller, M.D.

INSTRUCTORS *(continued)*

Sitaram Pillarisetty, M.D.
Max Yergan, M.D.
Scott J. Zevon, M.D.

INSTRUCTOR IN CLINICAL NEUROLOGICAL SURGERY

George V. DiGiacinto, M.D.

INSTRUCTORS IN CLINICAL ORTHOPEDIC SURGERY

Jacquelin Emmanuel, M.D.
Caleb Medley, M.D.

INSTRUCTORS IN CLINICAL OTOLARYNGOLOGY

Ellsworth L. Frye, M.D.
Cecil D. Grimes, M.D.

INSTRUCTOR IN CLINICAL UROLOGY

Saeid Shamsian, M.D.

At Morristown Memorial Hospital

Associate Clinical Professors

John J. Castronuovo. *B.A., Columbia, 1970; M.D., New York Medical College, 1974*
Ames L. Filippone. *B.A., Cornell, 1950; M.D., 1953*
Warren Widmann. *M.D., Yale, 1961*

Assistant Clinical Professors

John Alkhas. *M.D., Tehran, 1959*
Rolf Bessin. *M.D., George Washington, 1964*
John Edoga. *B.A., Columbia, 1967; M.D., 1971*
Edward R. McLean. *M.D., Columbia, 1973*
Ghassem Niknejad. *M.D., Tehran, 1961*
Eugene Watkins. *M.D., Harvard, 1943*

INSTRUCTORS IN CLINICAL SURGERY

Carey Dolgin, M.D.
Hughes Dougan, M.D.
R. Alan Henseler, M.D.

At Overlook Hospital

Clinical Professor

Richard W. Brenner. *B.A., Princeton, 1954; M.D., Columbia, 1958*

Associate Clinical Professors

David Befeler. *B.A., Columbia, 1955; M.D., 1959*
Bruce J. Brener. *B.A., Yale, 1962; M.D., Harvard, 1966*
Charles J. Wittmann, Jr. *B.A., Princeton, 1958; M.D., Pennsylvania, 1962*

Assistant Clinical Professors

John H. Cooper. *B.S., Lawrence, 1947; M.B.A., Chicago, 1949; M.D., 1954*
Douglas M. Costabile. *B.A., Muhlenberg, 1946; M.D., Geneva, 1951*
John Joseph Hudock. *B.S., Northwestern, 1944; M.D., 1948*
Jerrold S. Lozner. *B.A., Columbia, 1967; M.D., Louisville, 1971*
Daniel L. Moore. *M.D., Johns Hopkins, 1958*

ASSOCIATES IN CLINICAL SURGERY

Joseph V. Bocchino, M.D.
Walter Groff, M.D.
Robert E. Knapp, M.D.
Thomas Logio, M.D.
Charles A. Loguda, M.D.
Saverio J. Panzarino, M.D.
Morton Perkoff, M.D.
Jerome Spivack, M.D.

At St. Luke's-Roosevelt Hospital Center

Professors of Clinical Surgery

Richard C. Eaton. *B.S., Franklin & Marshall, 1951; M.D., Pennsylvania, 1955*

Richard B. Stark. *B.A., Stanford, 1936; M.D., Cornell, 1941*
Walter Wichern. *B.S., Mount Union (Ohio), 1942; M.D., Harvard, 1945*

Professor

David M. Tilson. *B.A., Rice, 1963; M.D., Yale, 1967*

Clinical Professor

W. Graham Knox. *B.A., Columbia, 1939; M.D., 1942*

Senior Research Scientist

George A. Hashim (also Microbiology). *Ph.D., Columbia, 1967*

Associate Professor of Clinical Surgery

Bruce P. Mindich. *B.A., State University of New York (Syracuse), 1969; M.D., State University of New York (Downstate), 1972*

Associate Clinical Professors

Fadi F. Attiyeh. *B.Sc., American University of Beirut, 1965; M.D., 1969*
John E. Hutchinson. *B.S., Moorhouse, 1953; M.D., Meharry, 1957*
Robert E. McCabe. *B.A., Williams, 1948; M.D., Cornell, 1953*
Robert E. Miller. *B.A., New York University, 1953; M.D., State University of New York (Downstate), 1957*
Howard R. Nay. *B.A., Virginia Military Institute, 1952; M.D., Columbia, 1956*
James B. Rodgers. *B.A., Virginia, 1944; M.D., 1948*
Edward G. Stanley-Brown. *M.D., Pennsylvania, 1948*

Assistant Professor of Clinical Surgery

William G. Ramey. *B.A., Virginia, 1970; M.D., 1973*

Assistant Clinical Professors

Peter A. Bossart. *B.A., Muhlenberg, 1947; M.D., Cornell, 1951*
Thomas Dailey. *B.A., Princeton, 1957; M.D., Cornell, 1961*
Clayton R. DeHaan. *B.S., Florida, 1949; M.D., Columbia, 1953*
Paul D. Harris. *B.A., Princeton, 1954; M.D., Columbia, 1958*
James A. MacDonald. *B.A., Princeton, 1948; M.D., Columbia, 1950*
Haroutune A. Mekhjian. *B.S., American University of Beirut, 1961; M.D., 1965*
Robert J. Mulcare. *B.A., Princeton, 1957; M.D., Columbia, 1961*
James H. Terry, Jr. *B.S., Arizona, 1949; M.D., Columbia, 1953*
Chin Bor Yeoh. *B.A., Yale, 1953; M.D., Harvard, 1957*

INSTRUCTORS IN CLINICAL SURGERY

Arnold H. Belgraier, M.D.
Charles R. Blair, M.D.
Peter B. Cinelli, M.D.
Hiram Sedgwick Cody, III, M.D.
Clarence A. Dunn, Jr., M.D.
Peter B. Fodor, M.D.
Steven Z. Glickel, M.D.
B. Smith Hopkins, M.D.
Richard H. Karpinksi, M.D.
John J. Keyser, M.D.
Farid J. Khoury, M.D.
Fred M. Kimmelstiel, M.D.
Ronald M. Linder, M.D.
Dianne R. Lorieo, M.D
Stephan G. Lynn, M.D.
Richard A. Marks, M.D.
Donna Maria Mendes, M.D.
Eric D. Moore, M.D.
Alexander J. Swistel, M.D.
Paul I. Tomljanovich, M.D.
Frank A. Veteran, M.D.
Hiroshi Washio, M.D.

INSTRUCTOR IN CLINICAL ORTHOPEDIC SURGERY
George J. Zambetti, M.D

Urology

John K. Lattimer Professor and Chairman

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At Presbyterian Hospital

Professor of Anatomy & Cell Biology

Anthony Bellve (in the Center for Reproductive Sciences). *B.Ag.Sci, Massey (New Zealand), 1964; M.Ag.Sci., 1967; Ph.D., North Carolina State, 1970*

Professor of Clinical Urology

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Peter J. Puchner. *B.A., Carleton, 1958; M.D., Columbia, 1962*

Associate Clinical Professors

Stanley B. Braham. *B.A., Columbia, 1944; M.D., 1947*
Frank W. Longo. *B.S., Maryland, 1951; M.D., 1955*
Myron S. Roberts. *B.A., Syracuse, 1950; M.D., State University of New York (Upstate), 1954*

Research Scientist

Paul B. Fisher. *B.A., Hunter, 1968; M.A., Lehman, 1971; Ph.D., Rutgers, 1974*

Assistant Professors

Mitchell Clark Benson. *B.S., Union, 1973; M.D., Columbia, 1977*
Kevin A. Burbige. *B.A., Siena, 1972; M.D., Wayne State, 1976*
Ihor Steven Sawczuk. *B.A., New York University, 1974; M.D., Medical College of Pennsylvania, 1979*

Assistant Professor of Biochemistry & Molecular Biophysics

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Assistant Professor of Urologic Biochemistry

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Assistant Professor of Clinical Urology

John D. Birkhoff. *B.A., Harvard, 1964; M.D., Columbia, 1969*

Assistant Clinical Professors

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John P. Grant. *B.A., Amherst, 1954; M.D., Columbia, 1962*
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ASSOCIATES IN CLINICAL UROLOGY

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Charles E. Umhey, Jr., M.D.
James A. Umhey, M.D.

INSTRUCTOR

Steven Kaplan, M.D.

INSTRUCTORS IN CLINICAL UROLOGY

Luis M. Abreu, M.D.
Richard Fadil, M.D.
Roberto C. Granato, M.D.
Erol O. Gursel, M.D.
Gerald Hoke, M.D.
Richard Kroll, M.D.

ASSISTANTS

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Lenard E. Jacobson, M.D.

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Associate Clinical Professor

Rodman D. Carter. *B.A., Harvard, 1950; M.D., Columbia, 1956*

Assistant Professor of Clinical Urology

Bruce R. MacDonald. *B.A., Washington & Lee, 1964; M.D., Medical College of Virginia, 1968*

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ASSOCIATE IN CLINICAL UROLOGY

Urbano K. Guarin, M.D.

INSTRUCTORS IN CLINICAL UROLOGY

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Saeid Shamsian, M.D.

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Assistant Professor of Clinical Urology

Joseph Spence Ritter. *M.D., Seton Hall, 1963*

Assistant Clinical Professor

Robert R. White. *B.A., Amherst, 1949; M.D., Rochester, 1954*

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Morey Wosnitzer, M.D.

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Professor of Clinical Urology

Nicholas A. Romas. *B.A., Colgate, 1958; M.D., Columbia, 1962*

Associate Clinical Professor

Joseph N. Ward. *M.B.,Ch.B., University College (Dublin), 1949*

Assistant Professor of Clinical Urology

Franklin Charles Lowe. *B.A., Princeton, 1975; M.P.H., M.D, Columbia, 1979*

Assistant Clinical Professors

William J. Nelson. *B.A., Williams, 1945; M.D., New York Medical College, 1946*
Robert D. Wickham. *B.A., Drew, 1947; M.D., State University of New York (Albany), 1952*

Associate Research Scientist

Daniel Joseph Hryb. *Ph.D., City University of New York, 1972*

ASSOCIATES IN CLINICAL UROLOGY

William Reid Pitts, Jr., M.D.
Arumbi P. Subramaniam, M.D.

INSTRUCTORS IN CLINICAL UROLOGY

Walter Ivey Delph, M.D.
David G. Kaufman, M.D.
Waleed G. Maloof, M.D.
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Religious Holidays

It is the policy of the University to respect its members' observance of their major religious holidays. Officers of administration and of instruction responsible for the scheduling of required academic activities or essential services are expected to avoid conflict with such holidays as much as possible. Such activities include examinations, registration, and various deadlines that are a part of the academic calendar.

Where scheduling conflicts prove unavoidable, no student will be penalized because of absence for religious reasons, and alternative means will be sought for satisfying the academic requirements involved. If a suitable arrangement cannot be worked out between the student and the instructor involved, students and instructors should consult the appropriate dean or director. If an additional appeal is needed, it may be taken to the Provost.

Academic Discipline

The continuance of each student on the rolls of the University, the receipt of academic credits, graduation, and the conferring of any degree or the granting of any certificate are strictly subject to the disciplinary powers of the University.

Statement on Student Conduct

The Schools and Programs of the Health Sciences Campus of Columbia University expect that in and out of the classroom, on and off the campus, each student will act in an honest and

considerate manner at all times, and will respect the rights of others. While every subtlety of proper behavior cannot be detailed here, the Columbia policy is that harassment of others because of their race, sex, religion, or sexual orientation is unacceptable behavior and will be dealt with very severely. Every student at Columbia is required to live up to these standards so that we can be confident that all will benefit fully from the diversity to be found here.

Rules of University Conduct

The Rules of University Conduct (Chapter XLI of the Statutes of the University) provide special disciplinary rules applicable to demonstrations, rallies, picketing, and the circulation of petitions. These rules are designed to protect the rights of free expression through peaceful demonstration while at the same time ensuring the proper functioning of the University and the protection of the rights of those who may be affected by such demonstrations.

The Rules of University Conduct are University wide and supersede all other rules of any school or division. Minor violations of the Rules of Conduct are referred to the normal disciplinary procedures of each school or division ("Dean's discipline"). A student who is charged with a serious violation of the Rules has the option of choosing Dean's discipline or a more formal hearing procedure provided in the Rules.

All University faculty, students, and staff are responsible for compliance with the Rules of University Conduct. Copies of the full text are available at the Office of the University Senate, 406 Low Memorial Library, at the Office of Student Information Services, 208 Philosophy.

Policy Statement on Discrimination and Harassment

The following statement was adopted by the University Senate on April 27, 1990.

As a great center of learning, Columbia University prides itself on being a community committed to free and open discourse, and to tolerance of differing views. We take pride, too, in preparing the leaders of our society and exemplifying the values we hope they will uphold. These commitments are subverted by intolerance, bigotry and harassment. Even in recent history, we must recognize, race, ethnicity, religion, gender, sexual orientation, disability, and other irrelevancies have all occasioned attacks by the ignorant, the foolish, the sick, the evil. Instead of enjoying our differences and the richness they bring to our shared lives, some have chosen to make those differences the targets of anger and hate. As a community, we are committed to the principle that individuals are to be treated as human beings rather than dehumanized by treatment as members of a category that represents only one aspect of their identity.

This University resolutely condemns conduct that makes such targets of our differences. The free exchange of ideas central to the University can take place only in an environment that is based on equal opportunity for admission to academic and other programs and to employment, and on freedom from behavior that stigmatizes or victimizes others. All decisions concerning an individual's qualifications, free of stigmatizing consideration of race, color, national or ethnic origin, religion, disability, gender, sexual orientation, marital status, age, citizenship status, or Vietnam Era or disabled veteran status. Nor will Columbia tolerate any behavior that harasses members of the community on the basis of any of these qualities. Such behavior will be regarded as a violation of the standards of conduct required of any person associated with the Univerity and will subject the person guilty of it to the full range of internal institutional discipline, including permanent separation. While mediation and consensual resolution are of course to be encouraged, we also recognize the right of all persons who believe themselves to have been the targets of such behavior to institute a formal grievance. Coercion to require them to overlook or retract their complaints fosters discrimination and harassment and is equally intolerable in our community.

It is not enough to be prepared to respond when ugliness appears. Members of a community such as ours must work preventively as well, to ensure that all our dealings with each other are marked by decency and characterized by civility. Columbia is committed to do what it can to engender mutual respect, understanding, and empathy. The University acknowledges a special responsibility to develop sensitivity to the concerns of those among us most vulnerable to discrimination and harassment.

Columbia devotes its resources to these commitments in many ways. Particulary noteworthy are the President's Committee for the Promotion of Mutual Understanding and Civility, charged with building a tolerant and vibrantly diverse community among us, and the Office of Equal Opportunity and Affirmative Action, responsible for coordinating the University's resources for responding to incidents of alleged discrimination or harassment. Ms. Rosalind Fink is the Director of the Office of Equal Opportunity and Affirmative Action, which is located in 305 Low Memorial Library. The telephone number of the office is 854-5511.

Statement of Nondiscriminatory Policies

The University is required by certain Federal statutes and administrative regulations to publish the following statements: Consistent with the requirements of Title IX of the Education Amendments of 1972, as amended, and Part 86 of 45 C.F.R., the University does not discriminate on the basis of sex in the conduct or operation of its educational programs or activities (including employment therein and admission thereto). Inquiries concerning the application of Title IX and Part 86 of 45 C.F.R. may be referred to Rosalind S. Fink, Director of the Office of Equal Opportunity and Affirmative Action (305 Low Library, New York, NY 10027, telephone 854-5511), or to the Director, Office of Civil Rights (Region II), 26 Federal Plaza, New York, NY 10007.

Columbia University admits students of any race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the University. It does not discriminate on the basis of race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other University-administered programs.

Consistent with the requirements of Section 504 of the Rehabilitation Act of 1973, as amended, and Part 84 of 45 C.F.R., the University does not discriminate on the basis of handicap in admission or access to, or employment in, its programs and activities. Section 503 of the Rehabilitation Act of 1973 requires affirmative action to employ and advance in employment qualified handicapped workers.

The University in addition desires to call attention to other laws and regulations that protect employees, students, and applicants.

Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination on the basis of race, color, or national origin in programs or activities receiving Federal financial assistance. Title VII of the Civil Rights Act of 1984, prohibits employment discrimination because of race, color, religion, sex, or national origin. Executive Order 11246, as amended, prohibits discrimination in employment because of race, color, religion, sex, or national origin and requires affirmative action to ensure equality of opportunity in all aspects of employment. In addition, New York Human Rights Law, Article 15, Executive Law Section 296 prohibits discrimination in employment because of marital status.

The Equal Pay Act of 1963 prohibits discrimination on the basis of sex in rates of pay. The Age Discrimination Act of 1967, as amended, prohibits discrimination in employment on the basis of age.

The Columbia University Senate on December 1, 1978, passed a resolution announcing its general educational policy on discrimination which reaffirms the University's commitment to nondiscriminatory policies in the above mentioned categories, as well as its policy not to discriminate on the basis of sexual orientation.

Section 402 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, prohibits job discrimination and requires affirmative action to employ and advance in employment qualified special disabled veterans and veterans of the Vietnam era.

All employees, students, and applicants are protected from coercion, intimidation, interference or discrimination for filing a complaint or assisting in an investigation under any of the foregoing policies and laws.

The University's Office of Equal Opportunity and Affirmative Action has also been designated to coordinate the University's compliance activities under each of the programs referred to above. Any employee who believes that he or she has been denied opportunity should contact this Office, which will investigate complaints and counsel employees on questions relating to equal opportunity and affirmative action.

Discrimination Grievance Procedure

The University's Discrimination Grievance Procedure is available to enrolled students who feel that they have been the victims of sexual harassment or discrimination on the basis of race, religion, national or ethnic origin, sex, sexual orientation, marital status, age, handicap, or Vietnam era or qualified special or disabled veteran status. A copy of the Procedure is available in the Office of Equal Opportunity and Affirmative Action, 305 Low Library (854-5511).

A complaint under this Procedure is initiated through completion of a Discrimination Complaint Form, also available in the Equal Opportunity Office. Staff in that office will assist in completing the form and are also available for confidential counseling and informal investigation of discrimination claims.

Protection Against Sexual Harassment

Policy Statement on Sexual Harassment

Federal Law (Title VII of the Civil Rights Act of 1964) provides that it shall be an unlawful discriminatory practice for any employer, because of the sex of any person, to discharge without just cause, to refuse to hire, or otherwise to discriminate against that person with respect to any matter directly or indirectly related to employment. Harassment of any employees on the basis of sex violates this federal law.

To help clarify what is unlawful sexual harassment, the Federal Equal Employment Opportunity Commission (EEOC) has issued Guidelines on the subject. While the EEOC Guidelines apply only to faculty and other employees, the University prohibits sexual harassment of any member of the Columbia community, whether such harassment is aimed at students, faculty, or other employees, and violators will be subject to disciplinary action. Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature will constitute sexual harassment when:

1. submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
2. submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual; or,
3. such conduct has the purpose or effect of unreasonably interfering with an individual's academic or work performance or creating an intimidating, hostile, or offensive academic or working environment.

Any person who believes that he or she is being sexually harassed should seek a resolution of the problem through discussion with the person directly concerned. If this does not resolve the matter, or if there is a reluctance to deal directly with the person involved, the problem should then be brought to the attention of a member of the University Panel on Sexual Harassment. A list of current panelists appears on pp. 167–168. Advice may also be sought from the Office of Equal Employment Opportunity and Affirmative Action (305 Low Memorial Library; 854-5511). If these steps have not resolved the problem, the applicable University Grievance Procedure that is available if no other University grievance procedure is specifically applicable. No one at the University may retaliate in any way against a person who makes a claim of sexual harassment.

Charge of the University Panel on Sexual Harassment

The Columbia Panel on Sexual Harassment is composed of trusted, accessible, and sympathetic members of the University community who act as mediators. Their goal is the protection and counseling of any member of the University who is made to feel personally pressured or uncomfortable because of the behavior of another University member who is in a position of power. Members of the Panel provide a safe, impartial, nonadversarial setting in which the problem can be considered or solved, through confidential counseling and, when requested, mediation between the complainant and the alleged harasser. The Panel thus provides guidance and protection for the accused as well, identifying false or mistaken accusations, misunderstandings, or unconscious behavior. Panel members finally become a link through which the University can take account of, and take appropriate action against those on campus who are behaving illegally. The Panel on Sexual Harassment is thus a timely, protective, and compassionate arm of the University, one which not only sensitizes and educates the University community, but also demonstrates that University's commitment to fair treatment of all its members.

Sexual Harassment Complaint Procedures

A. Going to a Panelist

1. A complainant comes to a Panel member with a complaint, to report an incident, or to seek advice.
2. The Panel member obtains data through discussion with the complainant, but keeps no records.
3. The Panel member selects one of the counseling or mediation options suggested by his or her training.
4. If the case seems serious enough, the Panel member refers it to the Equal Opportunity/Affirmative Action Office.

B. Initiating a Formal Investigation

1. A formal investigation may be initiated in either of the following ways:

a. A complainant files a formal grievance under the applicable University grievance procedure. This step may be taken at any time, either with or without consulting a Panel member.

b. A Panel member, believing that further action in a particular case might be appropriate, with the permission of the complainant, consults with the director of the EOAA office and the General Counsel, or their designees. Consultations among the Panel member, General Counsel, and EOAA office may also occur in a case of multiple complaints.

2. All investigatory or formal actions taken will be conducted by the University and not by the Panel.

Panel Membership List

While Panelists are identified by location, school, or administrative area on this list, each of them is in fact available to any member of the Columbia community. Persons who feel uncomfortable speaking with "their" Panelists are encouraged to seek out a Panelist from elsewhere in the University.

Morningside

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Associate Professor
408 Avery
854-3596, 854-3414

Ann Bartel
Graduate School of Business
Professor
710 Uris
854-4419
(on leave, autumn 1990)

Stephen H. Unger
School of Engineering and Applied Science
Department of Computer Science
Professor
505 Computer Science
854-8187, 854-2736

Kenneth Goldstein
Graduate School of Journalism
Professor
608B Journalism
854-4718, 854-4150

William Young
School of Law
Professor
8W8 Law
854-2645

Phyllis Dain
School of Library Service
Professor
611 Butler Library
854-4032

Samuel Miller
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Associate Professor
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Debra Wolgemuth
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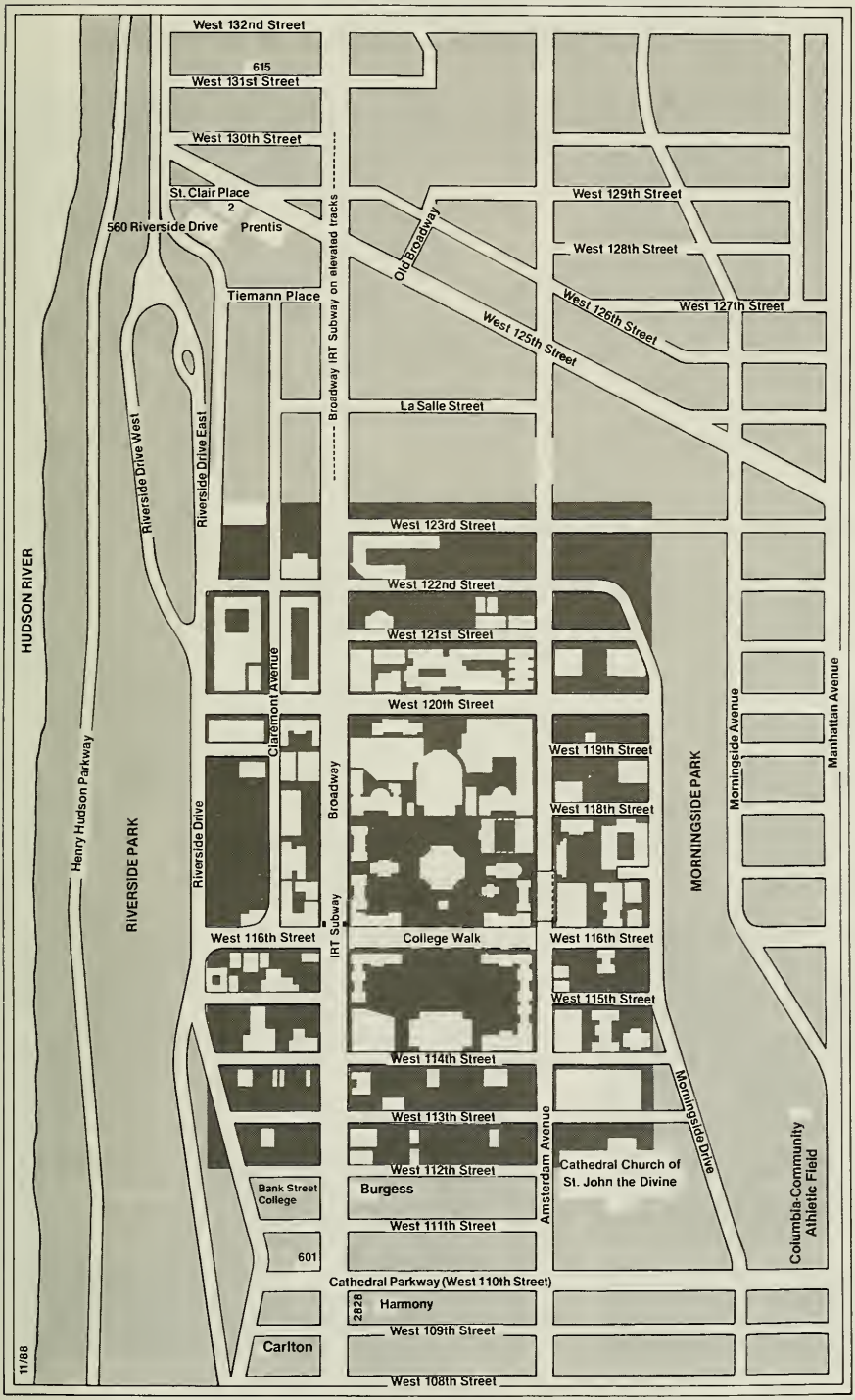
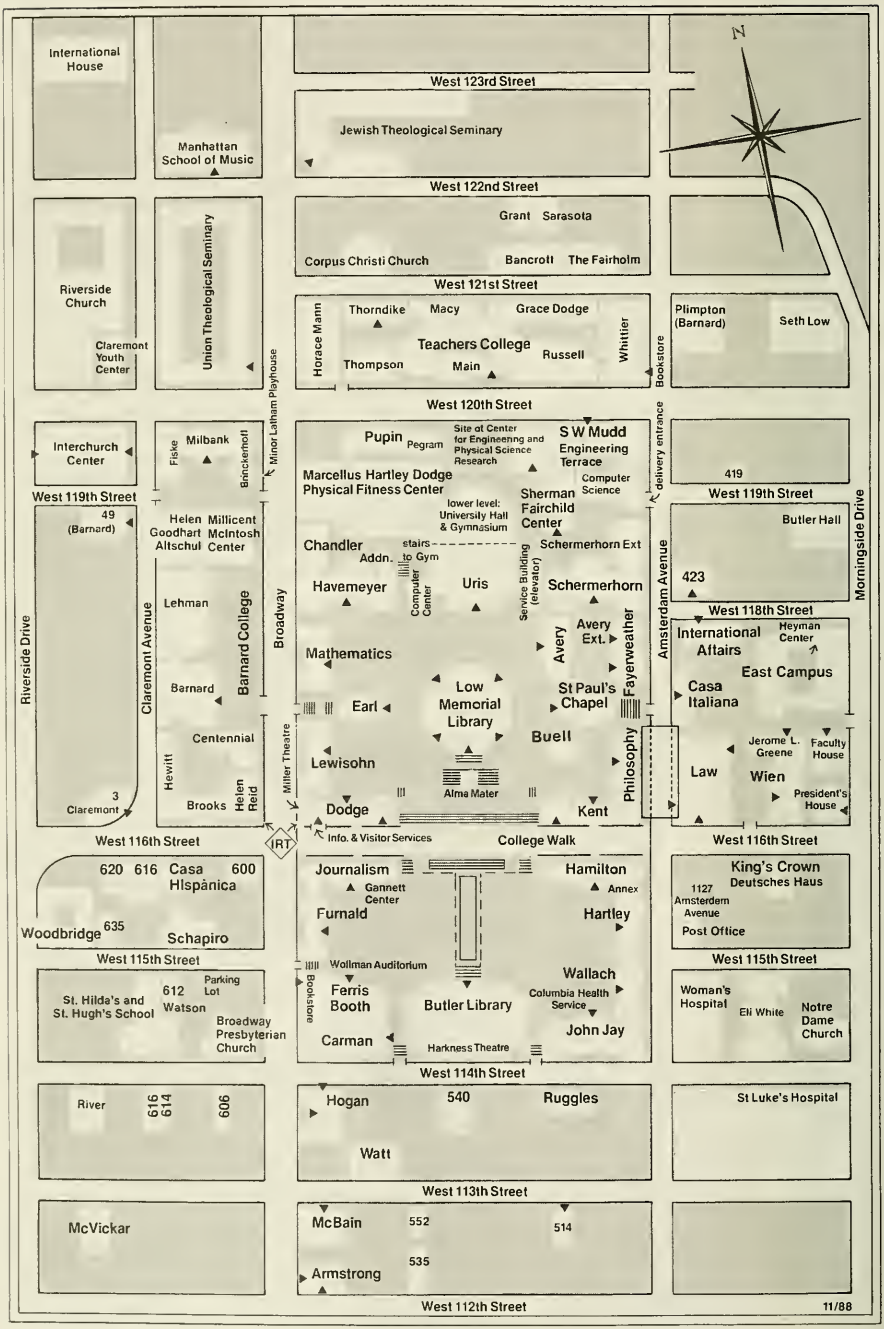
The Morningside Heights Area of New York City



COLUMBIA UNIVERSITY
The Morningside Campus & Environs



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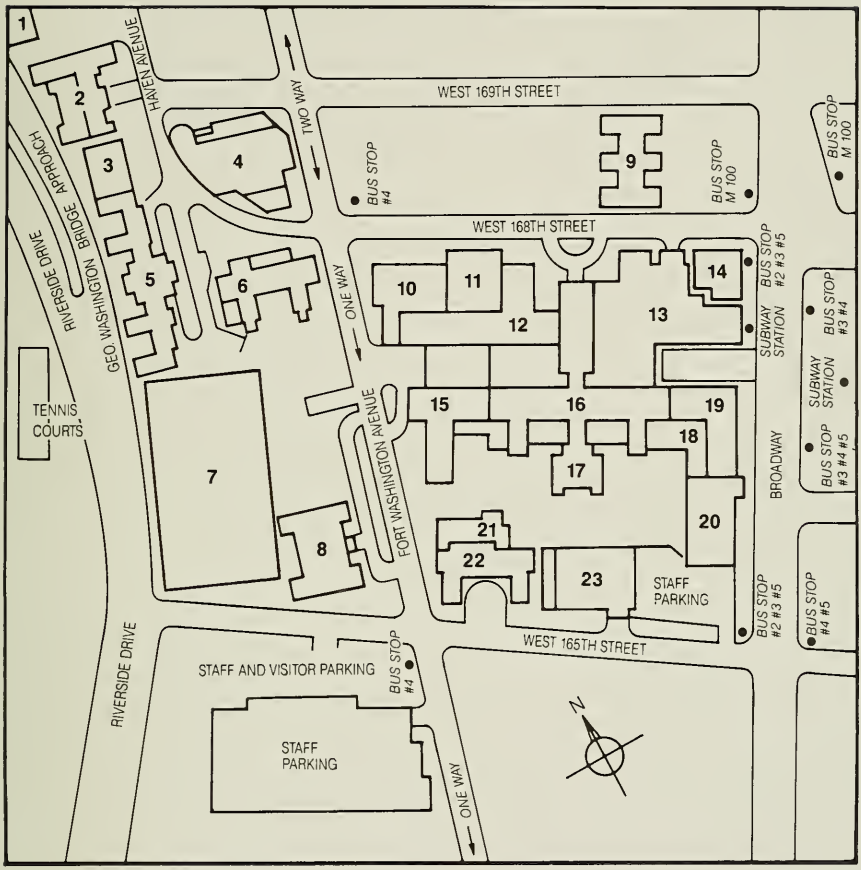

1. Bard Haven Apartments
2. Bard Hall Medical Student Residence
3. The Lawrence C. Kolb Research Building
4. Armand Hammer Health Sciences Center– Augustus C. Long Library
5. The New York State Psychiatric Institute
6. The Neurological Institute of New York
7. The Milstein Hospital Building
8. The Dana W. Atchley Pavilion
9. School of Nursing
10. William Black Medical Research Building
11. Alumni Auditorium
12. College of Physicians and Surgeons
13. Vanderbilt Clinic
14. School of Public Health
15. The Harkness Pavilion
16. The Presbyterian Hospital Building
17. The Pauline A. Hartford Memorial Chapel
18. Radiotherapy Center
19. Babies Hospital Building, North
20. Babies Hospital Building, South
    Babies Hospital
    Sloane Hospital for Women
21. Eye Institute Research Laboratories
22. The Edward S. Harkness Eye Institute
23. Service Building

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